

RETURN TO
ALBERT R. MANN LIBRARY
ITHACA, N. Y.



## Cornell University Library

The original of this book is in
the Cornell University Library.
There are no known copyright restrictions in the United States on the use of the text.


NEW YORK:
TOWNSEND MAC COUN.

## 1884.

$$
\begin{gathered}
\text { GR } \\
780 \\
\text { T94 } \\
1884 \\
8.14122 \\
\text { CORNELI } \\
\text { UNIVERSITY } \\
\text { LIBRARY }
\end{gathered}
$$


is the mature outgrowth of such notes. In order to make the book pleasing to the general reader, it has been the endeavor to exclude all technical terms pertaining to the science of botany, except the mere classification of plants into families to show the relation of one plant to another.

This arrangement has been made according to what is called the Natural System, it being the one most in use in the various books on botany, as more philosophical than the Linnæan System.

The sentiment or language assigned to each flower has been the result of an extended search through various works both ancient and modern, the most ancient being the richest, however, in material and in poetic ideas. The sentiments attached to flowers originating in the imaginative minds of the people, served as a means of communication at a time when the art of writing was known only to the few, these being mostly learned men and professional scribes.- As the well known disagreements of authors in attributing different languages to the same plant often make it difficult to determine which to choose, it is proper to state that the sentiments here given have been preferred because of the weight of authority in their favor.

Having led the reader into the bowers of nature, what more natural than that many paths should be found leading into the garden of the . poets, where rich intellectual blossoms are scattered with an unsparing hand? The love of poetry elevates the soul and makes it more susceptible to those delicate, spiritual and subtle influences that are found in other souls; it gives it a more rare appreciation of those higher beauties that are daily seen both in nature and art; it awakens a depth of feeling that almost entirely obliterates selfishness, and opens the heart to generous sympathies and warm impulses. The selections made for this work are numerous, and are the result of a very prolonged and laborious quest. They have been culled from many sources and various authors, foreign and native, and comprehend many of the choicest gems from the works of the best poets of all ages.
C. H. T.







#  

Abbey, Henry
Adams, John S.
Addison.
Aleyn.
Alimony, Lady.
Anacreon
Ancrum, Earl of
Angelo, Michael.
Armstrong, Dr. John.
Ascher, Isidore G.
Aylward, James S.
Babington.
Bailey.
Baillie, Joanna
Baillie, Joanna
Barrett, Miss.
Barrett, Miss.
Baxter, Sylvester.
Beattie.
Beaumont and Fletcher.
Beddoes, Thomas Lovell.
Bell, Alexander.
Bellman Carl Michael.
Benjamin, Park.
Bennett, Emily T.
Bennett, IV. C.
Benton, Joel.
Bidlake.
Bird.
Bird, Robert M.
Blackmore, Sir R.
Blair.
Blessington, Countess of.
Bogart, Elizabeth.
Boker, George H.
Bowles, Miss.
Bowring, John.
Bradley, Mary E.
Brock, Sallie A.
Brome.
Brooke.
Brooke, Lord.
Brooks, James G.
Brown.
Browne.
Browne, Mary Anne.
Browne, William.
Browning, Elizabeth Barrett.
Bruce, Michael.
Bryant, William Cullen.
Brydges, Sir S. E
Bulwer.
Burbidge, Thomas.
Burger, G. A
Burleigh.
Burns.
Butler.
Butler, Mrs. Frances A. K.
Byron.
Campbell.
Carey, Phabe
Carew, Lady.

Carew, Thomas
Cartwright.
Chandler, Mary.
Chandler, Mrs. C. N
Chapman, George.
Churchill.
Cibber.
Claber
Clare, John
Clark, Willis Gavlord.
Clarke, Sara Jane.
Clason, Isaac S.
Cleveland.
Clinch.
Clinch, I. H.
Coleridge.
Collins.
Collins.
Comer, Joseph.
Congreve.
Conrad, Robert T.
Cook, Eliza.
Cooper, George.
Cordner, Charlotte.
Cornwall, Barry.
Cotton,
Cowley.
Cowper.
Crabbe.
Cranch, Christopher Pearse.
Crown.
Cumberland.
Dana, R. H.
Daniel, Samuel.
Darley, George.
Darwin, Dr. E.
Davenant, Sir William.
Davenport.
Davies, Sir John.
Dawes, Rufus.
Decker.
Denham, Sir J.
Dickens, Charles.
Dinnies, Mrs. Anne Peyre.
Dobell, Sydney.
Dobell, Sydney. Mary B.
Dodge,
Donne.
Donne.
Dorr, Julia C. R.
Drayton.
Drayton, Nicholas.
Drew.
Dryden.
Dyer.
Easthurn, J. WV
Eldredge, Mrs. R. T
Eldredge, Mrs. R. T. Ellis.
Ellis, Edward
Embury, Mrs.
Emerson, Ralph Waldo.
Eusden.
Euphorion
Evans.

Everest, C. W.
Everett, John.
Fairfax.
Fawcett, Edgar.
Fenton.
Fielding.
Fields, James T.
Fitts, James Franklin.
Foote.
Ford, John.
Fountain.
Franklin.
Franklin, James.
Frisbie, Levi.
Frowde.
Fuller, Frances A.
Gay.
German, from the.
Gibles, A.
Gifford.
Gifford, Lena I.
Gilman, Caroline.
Glyndon, Howard.
Goffe.
Goldsmith.
Gould, Miss.
Granville.
Gray.
Greek, from the.
Green.
Greenwell, Dora.
Grey, Barton.
Habington, William.
Hale, Mrs. S. J.
Hall, Marcia.
Halleck.
Hamlin, G.
Harney, Will Wallace.
Harte, Walter.
Harvard.
Hay, William.
Hay, William.
Hayne, Paul H.
Hays, Sayley.
Hayl
Hayley
Heath.
Heine.
Hemans, Mrs.
Henderson.
Herbert, George.
Herbert, Wiliam.
Herrick, Robert.
Herrick, R
Heyw
Hill.
Hill, Aaron.
Hill, Kate. J.
Hillhouse, James A.
Hirst, Henry B.
Hoffman, Chas. Fenno.
Holmes, Oliver Wendell.
Home, John.
Hood, Thomas.

Howard, Mrs. V. E.
Howard, Sir Robert.
Howel.
Howitt, Mary.
Howitt, William.
Hoyt, Ralph.
Hughan, O. G.
Hugo, Victor.
Hugo, Josie E.
Munt, Josie E.
Hunt, Sir A.
Ingelow, Jean.
Jeffery.
Jenks, H. N.
Jewsbury, Miss.
Jowns, H. I.
Johns, H. I.
Johnson, Dr.
Jones, Sir W.
Jonson, Ben.
Keats, John.
Kemble, Frances Anne.
Kermode, Tamar Anne.
King, Dr. Henry.
Knowles.
Korner.
Labree, L.
Lalee.
Landon, L. E.
Langey, W. $\mathbf{W}$.
Larcom, Lucy.
Lavcom, Lucy, William. R.
Lawrence,
Lee. Mary E.
Lee, Mary E,
Leech, H. $\mathbf{H}$.
Leech, H, H.
Lewis, Anna Estelle.
Lewis, Mrs.
Leyden, Dr.
Lillo.
Locke, Jane E.
Locke, A. A.
Locke, Mrs.
Longfellow.
Lover, Samuel.
Lowell, James Russell.
Lynch, Charlotte Anne.
Lyttleton.
Macaulay, Lord.
Machan.
Mackellar.
Madden, Dr. S.
Malcolm, Edith.
Mallet.
Mant.
Marloe.
Marmynn.
Marston.
Mason.



Your voiceless lips, O flowers! are living preachers,
Each cup a pulpit, every leaf a book,
Supplying to my fancy numerous teachers
From loneliest nook.
Floral Apostles! that in dewy splendor
"Weep without woe, and blush without crime,"
$O$, may I deeply learn, and ne'er surrender,
Your love sublime!
"Thou wert not, Solomon, in all thy glory,
Arrayed," the lilies cry, "in robes like ours!
How vain your grandeur! ah, how transitory
Are human flowers!"
In the sweet-scented pictures, heavenly artist!
With which thou paintest Nature's wide-spread hall,
What a delightful lesson thou impartest
Of love to all!
Not useless are ye, flowers! though made for pleasure;
Blooming o'er field and wave, by day and night,
From every source your sanction bids me treasure
Harmless delight.
Ephemeral sages! what instructors hoary
For such a world of thought could furnish scope?
Each fading calyx a memento mori,
Yet fount of hope.
Posthumous glories! angel-like collection!
Upraised from seed or bulb interred in earth,
Ye are to me a type of resurrection
And second birth.
Were I in churchless solitudes remaining,
Far from all voice of teachers and divines, My soul would find, in flowers of God's ordaining, Priests, sermons, shrines.
-Horace Smith.





## 

（1）phioglogsum vulgatum．Natural Order：Filices－Fern Family．


STRANGE name has this singular little plant，being derived from two Greek words，ophis，meaning serpent，and glossa，a tongue；so called from the lance－like spike on which the seeds are produced．It belongs to the beautiful family of ferns，most of which propagate themselves by seeds or些 spores，arranged in various ways on the back of their leaves， some being too minute to be visible to the naked eye．It is found in low grounds，with solitary fronds measuring from two to three inches in length．It has been chosen as an emblem of deceit，because those by whom we are deceived are usually compared to serpents lurking in the grass，and ready to sting us unawares．

## 思的隹．

> $A^{\text {ND this was he who loved me；he who came }}$ To whisper vows to my too willing ear With lip of melody and heart of flame； Vows whose glad truth I deem＇d so trebly dear To him who breathed them，that had doubt or fear Been raised within my heart，they could not grow－ He whose bright eyes bespoke a soul sincere－ This；this was he who－vain remembrance now！－ He lives to scorn the past－he lives to break his vow．
$\mathrm{N}^{\mathrm{O}}$ man＇s condition is so base as his；
None more accursed than he；for man esteems
Him hateful＇cause he seems not what he is；
God hates him＇cause he is not what he seems；
What grief is absent，or what mischief can Be added to the hate of God and man？
－Francis Quarles．$^{2}$
$\AA_{\text {And with }}^{\mathrm{H} \text { ！that deceit should steal such gentle shapes，}}$ And with a virtuous visor hide deep vice！
－Shakespeare．

B ETTER the truth，$_{\text {Though it bring me ruth，}}$ Than a lie as sweet as the dreams of youth． Better to stand
In a lonely land， My feet unshod in its desert sand， Than to blindly go Where cool streams flow， And a serpent coils in the grasses low． －Mary E．Bradley．


## syexatum.

Ageratum fitexicamum. Natural Order: Composita-Aster Family.


## Pulftenty

> HER air, her manners, all who saw admired; Courteous, though coy, and gentle though retired;
> The joy of youth and health her eyes display'd, And ease of heart her every look convey'd. -Crabbe.
$T$ HE nymph did like the scene appear,
Serenely pleasant, comely fair;
Soft fell her words as blew the air.
-Prior.
$\mathrm{W}^{\mathrm{HAT}}$ are these wondrous civilizing arts, This Roman polish, and this smooth behavior, That render man thus tractable and tame?
-Addison.

> CASE in your mien, and sweetness in your face,
> You speak a siren, and you move a grace;
> Nor time shall urge these beauties to decay, While virtue gives what years shall steal away.

-Tickell.
IN simple manners all the secret lies:
Be kind and virtuous, you'll be best and wise.
$\bigcup_{\text {Lover of peace, and friend of human kind. }}^{\text {F }}$ -Young. --Pope.

A
MORAL, sensible, and well-bred man
Will not affront me, and no other can.


## Ainantus.

Ailautus glaùulaga. Natural Order: Rutacea-Rue Family.








## Amaxyllis.

$\mathfrak{L p p r e k e l i a}$ formosissima. Natural Order: Amaryllidacea-Amaryllis Family.
 UMEROUS varieties of these beautiful tropical bulbs are to be found with florists and seedsmen, the most common being, perhaps, those known as the Atamasco, Belladonna, and Jacobea lilies, from their superb, lily-like flowers. There are, however, about a hundred and fifty others, differing in their coloring, time of blooming, or shape of flower, that are worthy all the enthusiasm they have inspired. The root is similar to a large onion, either tapering upward or flattened, according to the species; the leaves thick, long and narrow; the flower-stalk about a foot high. They are grown in pots, either as window or greenhouse plants. - The Amaryllis receives its name from a nymph, mentioned in the Eclogues of Virgil, where Corydon thinks the cruel anger and proud disdain of Amaryllis was easier to bear than the cool indifference of Alexis, whom he so madly loved.

## Tring.

PRIDE, self-adorning pride, was primal cause
Of all sin past, all pain, all woe to come.
-Pollock.

WAKEN, thou fair one! up, Amaryllis!
Morning so still is;
Cool is the gale;
The rainbow of heaven,
With its hues seven,
Brightness hath given
To wood and dale;
Sweet Amaryllis, let me convey thee;
In Neptune's arms naught shall affray thee;
Sleep's god no longer power has to stay thee, Over thy eyes and speech to prevail.

OW poor a thing is pride! when all, as slaves, Differ but in their fetters, not their graves.
-Daniel.
$T \mathrm{HOL}^{\gamma} \mathrm{GH}$ various foes against the truth combine Pride, above all, opposes her design;
Pride, of a growth superior to the rest,
The subtlest serpent, with the loftiest crest, Swells at the thought, and kindling into rage, Would hiss the cherub Mercy from the stage. -Cowper.
I'LL go along, no such sight to be shown, But to rejoice in splendor of mine own.

13





## Ancmume,

Anemme coronaria. Natural Order: Ranunculacea-Crozefoot Family.

$\qquad$
IND-FLOWER is a frequent appellation of this beautiful fw little plant, which comes from the countries bordering等 $m_{0}$ lectively as the Levant. We find quite a beautiful fable concerning it in heathen mythology: Anemone was a nymph greatly beloved of Zephyr, and Flora, being jealous of her beauty, banished her from court, and finally transformed her into the flower that bears her name; whence it is sometimes taken to express withered hopes. It is also connected with the story (already given) of the love of Venus for Adonis, on which account the language has been made "Anticipation," as she spent one-half the year longing and watching for his return.

## 

$T \begin{gathered}\mathrm{O} \text { the fond, doubting heart its hopes appear } \\ \text { Too brightly fair, too sweet to realize; }\end{gathered}$
All seem but day-dreams of delight too dear;
Strange hopes and fears in painful contest rise, While the scarce-trusted bliss seems but to cheat the eyes.

- Mrs. Tighe.

CHE looked from out the window With long and asking gaze,

From the gold-clear light of morning To the twilight's purple haze. Cold and pale the planets shone, Still the girl kept gazing on.

From her white and weary forehead Droopeth the dark hair, Heavy with the dews of evening, Heavier with her care; Falling as the shadows fall, 'Till flung 'round her like a pall.

- L. E. Landon.
[ N our hearts fair hope lay smiling Sweet as air, and all beguiling;
And there hung a mist of bluebells on the slope and down the dell;
And we talked of joy and splendor
That the years unborn would render,
And the blackbirds helped us with the story, for they knew it well.











## sish.

fraximg Ahericana. Natural Order: Oleacea-Olive Family.


EAUTIFUL is the ash, one of the most dignified denizens of the forest, rising to a height of from thirty to forty feet without branching, and then crowning itself with large, dense and handsome foliage to an extent fully equal to the growth of its stately trunk. It delights in moist locations, as the banks of rivers and marshes, and does not thrive well in barren or bleak situations.. Its timber is elastic, light, tough and durable, and is much used by car-builders, carriage-makers, wheelwrights and ship-builders, as well as in the manufacture of agricultural implements.

## Graminent.

WITH goddess-like demeanor forth she wentNot unattended, for on her as a queen
A pomp of winning graces waited still, And from about her shot darts of desire Into all eyes to wish her still in sight.

-Milton.

WHAT is grandeur? Not the sheen
Of silken robes; no, nor the mien
And haughty eye Of old nobility-
The foolish that is not, but has been.
The noblest trophies of mankind Are the conquests of the mind.

MARK her majestic fabric! She's a temple Sacred by birth, and built by hands divine; Her soul's the deity that lodges there; Nor is the pile unworthy of the god. -Dryden.

DHAT winning graces, what majestic mien! She moves a goddess, and she looks a queen.
[ WAS born with greatness;
1 I've honors, titles, power, here within:
All vain external greatness I contemn.
-Crown.

TKNOW an ash
Named Ygg-drasill;
A stately tree,
With white dust strewed.

Thence come the dews
That wet the dales.
It stands aye green
O'er Urda's well.
-Henderson's Iceland'





## Anxixulix.

|jorimula auricula. Natural Order: Primulacea-Primrose Family.


> AL that imagination's power could trace,
> Breath'd in the pencil's imitative grace; O'er all the canvas, form, and soul, and feeling, That wondrous art infus'd with power of life; Portray'd each pulse, each passion's might revealing; Sorrow and joy, life, hatred, fear and strife.
> -From the Spanish.

THEN first from love, in Nature's bowers, Did Painting learn her fairy skill, And cull the hues of loveliest flowers, To picture woman lovelier still. -Moore.
$\mathrm{E} R E$ yet thy pencil tries her nicer toils,
Or on thy palette lie the blended oils, Thy careless chalk has half achieved thy art, And her just image makes Cleora start.

COME! the colors and the ground prepare:
Dip in the rainbow, trick her off in air; Choose a firm cloud before it fall, and in it Catch, ere she change, the Cynthia of this minute.
-Pope.

IS she not more than painting can express, Or youthful poets fancy when they love?
-Rowe.
${ }^{\prime} T$ IS in life as 'tis in painting:
Much may be right, yet much be wanting.
-Prior.

COME, thou best of painters,
Prince of the Rhodian art;
Paint, thou best of painters,
The mistress of $m y$ heart.
-Wm. Hay's Trans, Anacreon (Greek).


## 

Baccharis halimifolia. Natural Order: Composita-Aster Family.


HIS shrub is from six to twelve feet high, and grows usually in alluvial soil, which is washed up from the bed of the sea or rivers and deposited on the shore. A white dust covers the leaves and branches, and the flower heads that bear the seeds are furnished with long, slender hairs. The flowers are white, with a tint of purple, and appear during the fall months. It has sufficient beauty to recommend it for cultivation. The name of this shrub is derived from Bacchus, the deity of wine and reveling, because its fragrance savors of wine. It is sometimes called Groundsel Tree, from its resemblance to the weedy plant of that name.

## Thtafation.

$\left[\begin{array}{l}N \text { what thou eat'st and drinkest seek from thence } \\ \text { Due nourishment, not gluttonous delight; }\end{array}\right.$ So thou may'st live, till, like ripe fruit, thou drop Into thy mother's lap, or be with case Gather'd, not harshly pluck'd, for death mature.

- Mifitou.

W
INE is like anger; for it makes us strong, Blind and impatient, and it leads us wrong;
$0^{\mathrm{H}}$ thou invisible spirit of wine, If thou hant no name to be known by, let The strength is quickly lost, we feel the error long. Us call thee devil.

1 Obscures their sight, whose fancy it inspires. -Hill.

COULD every drunkard, ere he sits to dine, Feel in his head the dizzy fumes of' wine, No more would Bacchus chain the willing soul, But loathing horror shun the poison'd howl.
-Merizale.

T'HOU sparkling bowl! thou sparkling bowl!
Though lips of bards thy hrim may press, And eyes of beanty o'er thee roll,

And song and dance thy power confess, I will not touch thee! for there clings
A scorpion to thy side, that stings. - Fohn Pierpont.

## Tightilox sinttom。

Uentauria cymues. Natural Order: Composite-Aster Family.


ENTAUREA is said to derive its name from the centaur Chiron, the fabled son of Saturn, who was cured by an application of it after having been wounded in the knee by a poisoned arrow from the bow of Hercules. Another mythological narrative says that Chiron's wound was incurable; but that, having been born of immortal parents, he could not die, and was consequently placed by the gods in the firmament as a constellation, being called Sagittarius. The plant is a hardy annual, and grows about two feet high. The blossoms vary much in color, appearing singly on the ends of the branches.

## 

$\mathrm{H}^{+}$E meets the smile of young and old, he wins the praise of all, He is feasted at the banquet, and distinguished at the ball; When town grows dull and sultry, he may fly to green retreats, A welcome visitor in turn at twenty country seats;
He need not seek society, for, do whate'er he can, Invitations and attentions will pursue the single man.

ABACHELOR
May thrive, by observation, on a little; A single life's no burthen; but to draw In yokes is chargeable, and will require A double maintenance. -Fohn Ford.
[F I am fair, 'tis for myself alone;
I do not wish to have a sweetheart near me, Nor would I call another's heart my own,

Nor have a gallant lover to revere me:

THE ills of love, not those of fate, I fear; These I can brave, but those I cannot bear. -Dryden.

AWIFE! Oh, fetters To man's bless'd liberty! All this world's prison, Heav'n the high wall about it, sin the goaler;
But th' iron shackles weighing down our heels
Are only women.
-Decker.

For surely I would plight my faith to none, [me; Though many an amorous cit might jump to hear For I have heard that lovers prove deceivers,
When once they find that maidens are believers.
-From Michael Angelo.
OOVE is not in our power -
Nay, what seems strange, is not in our choice. -Frowde.

## 

## Aftoluccella lexis. Natural Order: Labiata-Mint Family.



OLUCCA BALM, or Shell Flower, is a native of the Molucca or Spice Islands, where it mingles with the odoras iferous flowers of the clove, the citron and the lime. The stem is from one to two feet high, smooth, and of a sea-green color. It is an annual, often grown in the flowergarden as a curiosity, for its singular manner of infloresence. The calyx or floral sheath is large and bell-shaped, which suggests the appearance of a hollow shell, while down in the bottom sits the flower itself, out of sight, the color being a yellowish-green. The blooming time is from May to August.

## 

$\bigcup_{\text {For next it treateth of our native dust! }}^{\mathrm{H} \text { strange it }}$
Must dig out buried monsters, and explore
The green earth's fruitful crust;

Must write the story of her seething youth -
How lizards paddled in her lukewarm seas;
Must show the cones she ripened, and forsooth Count seasons on her trees;

BETSY! art thou Eve's true danghter? Betsy! hast a peering eye?
Wouldst thou read as clear as water
All the honeyed terms that lie Within that letter's fragile folds? Spell every word that letter holds, And know when thy young master Harry Or Lady Jane intends to marry?

Must know her weight, and pry into her age, Count her old beach-lines by their tidal swell; Her sunken mountains name, her craters gauge, Her cold volcanoes tell. -F̌ean Ingelow.

What! not yet in the secret, Betsy?
That's very puzzling - very! Let's see The letter's not from Lady Jane, No, no! you need not peep again.
A lady's hand - the envelope
Perfumed - the seal expresses "Hope."
The waiter waits - no longer tarry!
Go, give the letter to Lord Harry !

## Eve,

-Anonymors.

With all the fruits of Eden blest, Save only one, rather than leave That one unknown, lost all the rest.


## 

fllonatia ditmmat. Niatural Order: Labiata-Mint Family.

${ }^{2}{ }^{3}$
UCH coarser, and less delicate in odor, than the garden varieties, is the Wild Balm, commonly called Mountain Mint, *and scientifically named, as above, in honor of Monardes, a Spanish botanist of the sixteenth century, who wrote a work on the medicinal virtues of the botanical productions of the new world. It is a tall, herbaceous plant, found in the fields and woods, having fragrant leaves and crimson flowers that improve under cultivation. In medicine it possesses stimulating and carminitive properties. An infusion of the leaves is known as Oswego tea; and the flowers yield the coloring principle of cochineal.

## 7) Vałme Yraur Stimentit.

$T H O U^{\prime} R T$ like a star; for when my was cheerless and forlorn, And all was blackness like the sky before a coming storm, Thy beaming smile and words of love, thy heart of kindness free, Illumed my path, then cheered my soul, and bade its sorrows flec.

H
HAST thon no human friend
To whom in hours like these to turn,
When thine o'erburdened soul will yearn
Its bitterness to end?
-.Jise M. H. Rand.

WE pine for kindred natures
To mingle with our own:
For communings more full and high
Than aught by mortals known.
1/rs. Hemans.

4 ND when the world looked cold on him, And blight hung on his name, She soothed his cares with woman's love, And bade him rise again.

0
$\int^{\text {CR }}$ hearts, my love, were form'd to be The genuine twins of sympathy, They live with one sensation; In joy or grief, but most in love, Like chords in unison they move, And thrill with like vibration. -Moore.

OVE'S soft sympathy imparts
That tender transport of delight
That beats in undivided hearts.
-Cartzuright.
KINDNESS by secret sympathy is tied,
For noble souls in nature are allied.


## 

Impatiens balsamina. Natural Order: Balsaminacere-fewel-Weed Family.


ADY'-SLIPPER, or the ordinary Balsam, is familiar to all as a product of our gardens. It is a native of the East Indies, and is worthy of notice. Within the last few years the double varieties have been grown as pot-plants, in which state they require very rich soil, and to have the tip of the main branch pinched off, when it will throw out side branches and form larger plants. They appear in every variety of color, and the fancy ones are streaked or mottled, many of them being nearly as double as the blossoms of that beautiful shrub the camelia japonica. The seed-pods burst when slightly pressed, from which circumstance they receive their Latin name, Impatiens, noli me tangere (impatient, touch me not).

## 

WHAT! canst thou not forbear me half an hour? Then get thee gone, and dig my grave thyself, And bid the merry bells ring to thine ear That thou art crown'd - not that I am dead.

> -Shakespeare.

A WRETCHED soul, bruised with adversity,
We bid be quiet, when we hear it cry;

But were we burdened with like weight of pain,
As much, or more, we should ourselves complain.
-Shakespeare.
$\int_{\mathrm{O}}^{\mathrm{O}}$, then, my song, speed swiftly to her;
Sing to her, plead with her late and long;
Hover around her, and gently woo her;
Perhaps she will hear thee some day, O Song!

DREACH patience to the sea, when jarring winds Throw up her swelling billows to the sky!
And if your reasons mitigate her fury, My soul will be as calm.
-Smith.

Out of the depths of the soul comes sorrow;
But, out of the depths of these days that cease, May come, like light 'round the feet of the morrow, Love's soft glory, our love's calm peace.
-Barton Grey.

## 

Atentjelia Cuindeni. Natural Order: Loasacea-Loasa Family.



the Golden Bartonia we have a beautiful annual from California, with an oval, lance-shaped leaf, indented similar to the thistle; the stems are procumbent and often a yard in length. The flowers, which much resemble a poppy, are of a most brilliant yellow, deepening toward the center into the true orange shade, and measuring from two to three inches in diameter. Within the center the numerous thread-like stamens spread themselves out over the petals, like a delicate fringe. The seeds should be sown where the plants are to grow, as they are transplanted with difficulty.

## 

$\oiiint \begin{gathered}\text { AD I but pearls of price -did golden pills } \\ \text { Of hoarded wealth swell in my treasury, }\end{gathered}$
Easy Ind win the fawning flatterer's smile And bend the sturdiest stoic's iron knee. -A. A. Locke.

T'HINK'ST thou the man whose mansions hold The worldling's pride, the miser's gold, Obtains a richer prize Than he who in his cot, at rest, Finds heavenly peace a willing guest, And bears the earnest in his breast Of treasure in the skies? -Mrs. Sigourney.

AMIGHTY pain to love it is, And 'tic a pain that pain to miss;
But, of all pains, the greatest pain
It is to love but love in vain.
Virtue now, nor noble blood,
Nor wit, by love is understood;
Gold alone does passion move;
Gold monopolizes love -Cowley.

O KNEW I the spell of gold,
I would never poison a fresh young heart With the taint of customs old;
I would bind no wreath to my forehead free, In whose shadows a thought might die, Nor drink, from the cup of revelry, The ruin my gold would buy. -Willis.

MADAM, I own 'tic not your person My stomach's set so sharp and fierce on;
But 'is your better part, your riches,
That my enamor'd heart bewitches!

- Butler.

A
MASK of gold hides all deformities;
Gold is heaven's physic, life's restorative.


## 我aybex

Algrica cerifera. Natural Order: Myricaces-Sweet Gale Family.



AYBERRY, a useful shrub, varying in height from two to eight feet, and flowering in April or May, is found in dry forests from Nova Scotia to Florida. It has a grayish bark and branching top, and its fruit consists of a globular stone, covered with white wax, which is separated by heat, usually boiling water. This product constitutes the Bayberry tallow d, of commerce, sometimes called myrtle wax. A bushel of berries yields about four pounds of wax. The botanical name comes from the Greek muro, to flow, because the stamens contract on the slightest touch, and are thence conceived to be easily irritated, even to tears.

## 

$\mathrm{B}^{\text {E temperate in grief! }}$ I would not hide
The starting tear-drop with a stoic's pride,
I would not bid the o'erburthen'd heart be still, And outrage nature with contempt of ill. Weep! but not londly! He whose stony eyes Ne'er melt in tears, is hated in the skies.

- Euphorion.

THE rose is fairest when 'tis budding new, And hope is brightest when it dawns from fears; The rose is sweetest wash'd with morning dew, And love is loveliest when embalmed in tears. - Scott.
$T$ WO other precious drops that ready stood,
Each in their crystal sluice, he, ere they fell, Kiss'd, as the gracious signs of sweet remorse And pious awe, that fear'd to have offended.

- Milton.

COME, chase that starting tear away, Ere mine to meet it springs. -Moore.

ET me wipe off this honorable dew
That silverly doth progress on my cheeks.

WITH a shriek heart-wounding loud she cried, While down her cheeks the gushing torrents ran,

IDE not thy tears! weep boldly, and be proud To give the flowing virtue manly way:
-Rowe. 'Tis nature's mark, to know an honest heart.


## 

Begonia discolor. Natural Order: Begoniacea-Begonia Family.
 ugly and unpleasant synonym. Some of them are a dark green with a band of silver, or groupings of silver blotches; or again entirely bronze, according to the individual plant. This species is grown chiefly for its foliage; the flowers are mostly white or faintly tinted, blooming on short stems. There are several kinds, however, with small waxy leaves that make a splendid appearance when in bloom, being handsome in color and of fine texture. The stems of the large foliage variety are very much distorted.

## 

CHE did corrupt frail nature with some bribe
To shrink mine arm up like a wither'd shrub,
To make an envious mountain on my back, Where sits deformity to make my body ; To shape my legs of an unequal size; To disproportion me in every part
Like to a chaos.
-Shakespeare.

M I to blame if nature threw my body
In so perverse a mold? yet when she cast Her envious hand upon my supple jointn,
Unable to resist, and rumpled them
On heaps in their dark lodging; to revenge Her bungled work, she stamped my mind more fair,

DEFORMITY in daring:
It is its essence to o'ertake mankind
By heart and soul, and make itself the equal Ay, the superior of the rest. There is
A spur in its halt movements, to become
All that others cannot, in such things
As are still free for both.
--Byron.

And as from chaos, huddled and deform'd, The gods struck fire, and lighted up the lamps That beautify the sky; so she inform'd This ill-shap'd body with a daring soul,
And, making me less than man, she made me more.

## Thedlywnex.

Campmula rotundifoliar. Natural Order: Campamulacea-Bellwort Family.
 THEN come the wild weather, come sleet or come snow, We will stand by each other however it blow.
Oppression and sickness, and sorrow, and pain, Shall be to our true love as links to the chain.

TO keep one sacred flume
Through life unchilled, ummoved,
To love in wintry age
The same that first in youth we lov'd, To ieel that we adore

With such refined excess, That tho' the heart would break with more, It could not live with les.: This is love-faithful love; Such as saints might feel above.

WHEN all things have their trial, you shall find Nothing is constant but a virtuous mind. -Shirley.

OVE, constant love!
Age cannot quench it - like the primal ray
From the vast fountain that supplies the day,
Far, far above
Our clond-encircled region, it will flow As pure and as eternal in its glow. - Park Benjamin.

COULD genius sink in dull decay,
And wisdom cease to lend her ray:
Should all that I have worshiped change,
Even this could not my heart estrange; Thou still wouldst be the first-the first That taught the love sad tears have nursed.

- Mrs. Embury.




## 



Ballota nigea. Natural Order: Labiata-Mint Family.
 introduced into this country through the commerce of the nations, as many of our now obnoxious weeds have found their way, concealed in various grains imported for seed. It is now frequently found naturalized in the fields and by the waysides. The stem is from two to three feet high, having broad, opposite leaves covered with a soft down. It derives its name from the Greek word ballo, to throw, or reject, on account of its offensive odor. It blooms in July, the flowers being either purple or white, and of little beauty.

## 3) Refect Yau.

AKE my esteem, if you on that can live;
But frankly, sir, 'tis all I have to give.
-Dryden.

$\mathrm{H}^{\mathrm{E}}$Of hope had long since flown.
No charms dwelt in his chosen themes,
Nor in his whisper'd tone;
And when with word and smile he tried
Affection still to prove,
She nerved her heart with woman's pride,
And spurn'd his fickle love. -Etizabeth Bogart.

Where is another sweet as my sweet, Fine of the fine, and shy of the shy?
Fine little hands, fine little feet Dewy blue eye.
Shall I write to her? shall I go?
Ask her to marry me by-and-hy?
Somebody said that she'd say no. -Tennyson.

F you oblige me suddenly to choose,
1 My.choice is made-and I must you refuse.

$$
-D r y d e n
$$

IKE a lovely tree
She grew to womanhood, and between whiles Rejected several suitors.

I HAVE heard-
But you shall promise ne'er again To breathe your vows or speak your pain. -Prior.

D Tell you-I do not, nor I cannot love you?
-Shakespeare.

## 

## Sappholea trifolia. Natural Order: Sapindacea-Soapberry Family.



ECULIAR to this handsome shrub, found in various sections of the United States, are the bladder-like capsules or pods, from which it derives its name, and in which are contained the seeds or nuts. These are hard, bony, smooth and polished. The flowers, which bloom in May, are white and hang in弯ishort, pendulous clusters, somewhat like bunches of grapes, whence the scientific Greek name, Staphylea. It grows to the height of six, eight, or even ten feet, chiefly in low lands, in moist woods, amongst the underbrush. The wood is firm and white, and well adapted for cabinet work.

## 

0 I! there are some Can trifle, in cold vanity, with all
The warm soul's precious throbs; to whom it is A triumph, that a fond, devoted heart Is breaking for them; who can bear to call Young flowers into beauty, and then crush them.
-Letitio E. Landon.

ROUND him some mysterious circle thrown
Repell'd approach and show'd him still alone; Upon his eye sat something of reproof, That kept at least frivolity aloof. --Byron.

$\mathrm{H}^{\mathrm{E}}$E was perfumed like a milliner; And twixt his finger and his thumb he held A pouncet-box, which, ever and anon
He gave his nose -
And still he smiled and talked;
And as the soldiers bare dead bodies by, He called them "untaught knaves unmannerlv,
To bring a slovenly, unhandsome corse Betwixt the wind and his nobility." -Shakespeare.

VOU oftentimes can mark upon the street The gilded toy whom fashion idolizes; Heartless and fickle, swelled with self-conceit, Avoiding alway what good sense advises.

$$
-W . H . C .
$$

${ }^{7} \mathrm{HE}$ joy that vain amusement gives, O, sad conclusions that it brings, The honey of a crowded hive, Defended by a thousand stings. 'Tis thus the world rewards the fools That live upon her treacherous smiles, She leads them blindfold by her rules, And ruins all whom she beguiles. - Cowper.

## fifxxixl

Borago officialis. Natural Order: Boraginacea-Borage Family.


NGLAND and the rest of Europe as well as America now own this plant in a naturalized state, though it is generally believed to have been originally indigenous to the region of Aleppo, in Turkey. It is cultivated in the kitchen garden for its young leaves, which are considered excellent for salads, pickles and pot-herbs. It is an annual, about two feet high, with oval leaves growing alternately on each side of the stem, the whole plant being rough and covered with hairs. It is also grown as an ornamental plant in the flower garden. The flowers are a pale blue, appearing in spring on the ends-of the branches. The plants of this whole family abound in mucilaginous juices containing much niter, and are said never to possess any poisonous or harmful quality.

## Mfruttats.

THE reed in storms may bow and quiver, Then rise again; the tree must shiver.

I do not love
Much ceremony; suits in love should not, Like suits in law, be rock'd from term to term.
-Shirtey.

CUDDENLY all the sky is hid As with the shutting of a lid.

- Fames Russell Lowvell.

Although
The air of Paradise did fan the house, And angels offic'd all, I will begone. --Shakespeare.

THIS is some fellow, Who, having been prais'd for bluntness, doth affect
A saucy roughness, and constrains the garb; Quite from his nature! he can't flatter, he, An honest mind and plain - he must speak truth: And they will take it so; if not, he 's plain. These kind of knaves I know, which in this plainness
Harbor more craft, and far corrupter ends,
Than twenty silly ducking observants,
That stretch their duty nicely
-Shakespeare.

## 

Sapunaria officinalis. Natural Order: Caryopkyllacer-Pink Family.


N dooryards of old-fashioned country houses, and by the roadsides throughout the country, this plant may be found in abundance. The place of its nativity is Europe, but it has long been naturalized in America. It is about two feet high, of a succulent, herbaceous growth, and nearly allied to the bunch pinks, though much coarser. The flowers bloom in clusters, and are the palest possible shade faltering between pink and white. The root is perennial, and inclined to spread and become obtrusive. As one means of curtailing its obtrusiveness, its seeds, which are very fertile and abundant, should be clipped and destroyed before they ripen. The bruised stalks make a lather in water, which quality gives it the name of Soapwort in our vernacular, as well as its scientific appellation Saponaria, from the Latin sapo, soap.

## Thtritian



SLDDEN rush from the stairway,
A sudden raid from the hall,
By three doors left unguarded,
They enter my castle wall.
They climb up into my turret, O'er the arms and back of my chair; If I try to escape, they surround me; They seem to be everywhere.
-Longfellow.

I had much rather see
Both are less poison to my eyes and nature.

> -Dryden.

B
$B^{\text {UTT }}$ the sound grew into word
As the speakers drew more near -
Sweet, forgive me that I heard
What you wished me not to hear.
Elizabeth Barrett Browning.
A LADY: In the narrow space
Between the husband and the wife, But nearest him-she showed a face

With dangers rife. - Fean Ingelow.

## 解䀘和，

Buxus sempervitrig．Natural Order：Euphorbiacere－Spurge Family．


GRAVERS on wood are much indebted to this tree for the blocks they use to work on，which，after having been sawed and made perfectly smooth，receive a slight coating of some white substance，usually white lead or Chinese white，to render the drawing more conspicuous．The artist＇s work is done in pencil or India ink．The engraver then follows with delicate touch the lines before him，and cuts the picture into the wood beneath．The botanical name of this shrub comes from the Latin． The word Buxus，box，is itself derived from the Greek puxos，pyx，or small box，and sempervirens is from the two Latin words semper， always，and virens，present participle of the verb virere，to be green． There are several varieties of this genus which are natives of Europe． The species known scientifically as the Buxus Nana，or Dwarf Box， is much used as a bordering for walks both here and abroad．

## Stainism．

$\bigcirc^{N}$ his dark face a scorching clime And toil，had done the work of time， Roughen＇d the brow，the temples bared， And sable hairs with silver shared， Yet left－what age alone could tame－ The lip of pride，the eye of flame；

The full－drawn lip that upward curl＇d， The eye that seem＇d to scorn the world． That lip had terror never blench＇d； Ne＇er in that eye had tear－drop quench＇d The flash severe of swarthy glow， That mock＇d at pain and knew not woe． －Sir Walter Scott．

N
TOR box，nor limes，without their use are made， Smooth－grain＇d and proper for the turner＇s trade； Which curious hands may carve，and seal With ease invade．
－Virgil．

THE rolling wheel，that runneth often＇round， The hardest steel in tract of time doth tear； And drizzling drops，that often do redound， Firmest flint doth in continuance wear：

Yet cannot $I$ ，with many a dropping tear， And long entreaty，soften her hard heart， That she will once vouchsafe my plaint to hear Or look with pity on my painful smart．
－Spenser．

## Tifxom,

Genista tinctoria. Natural Order: Leguminosa-Pulse Family.


$\mathrm{H}^{\mathrm{L}}$UMBLE we must be, if to Heaven we go; High is the roof there, but the gate is low; Whene'er thou speak'st, look with lowly eyeGrace is increased by humility. -Robert Herrick.
$T \begin{gathered}\text { HE cedar's shade like a cloud may lie } \\ \text { Athwart the lily's brightness - }\end{gathered}$ Yet why complain? it leaves no stain To mar the blossom's whiteness;
And darkly thus may pride and power

$\mathrm{H}^{4}$UMILITY is the eldest-born of virtue, And claims the birthright at the throne of heav'n. -Murphy.

HEAVEN'S gates are not so highly arched As princes' palaces; they that enter there
Must go upon their knees. - Fohn Webster.

Appear to press the lowly,
Yet never may the shadow stay
Where Faith, like blossom holy,
Keeps white the heart; to such there will be given A blest assurance of the love of Heaven. -Mrs. Hale.

IAM content to touch the brink Of the other goblet, and I think My bitter drink a wholesome drink, Because my portion was assigned Wholesome and bitter. Thou art kind, And I am blesséd to my mind. -Elizabeth Barrett Browning.

## 

Sorghum nulgatr. Natural Order: Graminea-Grass Family.

ARIOUS parts of the United States are favorable to the cultivation of this corn, which is manufactured into brooms, constituting a special industry of most of the Shaker communities, besides many private persons. It looks very much like the Indian corn as regards its leaves and height. When the panicle is sufficiently mature, the stalk is bent down at the top until ripe enough to cut. It is a native of the East Indies, and has been chosen as an emblem of labor. The Sorghum saccharatum, or Chinese sugar cane, is supposed to be another variety, which yields a saccharine juice, whence its name; but even this, it is said, does not give a product equal to the crystallized syrup of the East India species of the same character.

## Gutime.

ABOR is health. Lo! the husbandman reaping,
L How through his veins goes the life current leaping!
How his strong arm in its stalwart pride sweeping,
True as a sunbeam the swift sickle guides. -Mrs. Osgood.

CIVE me the fair one, in country or city, Whose home and its duties are dear to the heart, Who cheerfully warbles some rustical ditty, While plying the needle with exquisite art.
-Woodzorth.

MAN hath his daily work of body or mind Appointed, which declare his dignity; While other animals inactive range, And of their doings God takes no account.

COME, my fair love, our morning task we lose,
Some labor e'en the easiest life would choose;
Ours is not great, the dangling boughs to crop, Whose too luxuriant growth our alleys stop. -Dryden.
" $\mathrm{CO}_{\mathrm{O}}$ till the ground," said God to man,-
U "Subdue the earth, it shall be thine;" How grand, how glorious was the plan! How wise the law divine. -Mrs. Hale.

THIS my mean task Would be as heavy to me as odious; but The mistress, which I serve, quickens what's dead, And makes my labors pleasures. -shakespeare.


## 等Mgloss.

Auchusa officiulis. Natural Order: Boraginacea-Borage Family.
$\qquad$


UR gardens, fields and roadsides everywhere furnish this rough perennial plant, which produces an abundance of sweetscented purple flowers during the entire summer. The leaves are long and rough, from which it has received in England the name of Ox-tongue, and the stem is covered with bristly hairs. The root is used in medicine, producing a gentle moisture through the system. The root of one of the species yields the red dye that was so much used by the Athenian ladies as a rouge when that classic city was in its prime.

## 

THERETO when needed, she could weep and pray, And when she listed she could fawn and flatter, Now smiling smoothly, like to summer's day, Now glooming sadly, so to cloak the matter; Yet were her words but wind, and all her tears but water.

> --Sfenser.

GVERY man in this age has not a soul
Of crystal, for all men to read their actions Through; men's hearts and faces are so far asunder That they hold no intelligence.
-Beaumont and Fletcher.
$A_{\text {A story of sorrow and woe; }}^{\text {glittering volume may }}$
And night's gayest meteors may hover Where danger lies lurking below.

SO smooth he danbed his life with show of virtue,
He lived from all attainder of suspect.
-Shakespeare.

YeT there came a time
To my proud love's prime,
When that proved base I had deemed sublime.
By the cool stream's bed
My flowers hung dead,
And the serpent, hissing, upreared its head!
-Mary E. Bradley.

SO, friend, be warned! He is not one
Thy youth should trust, for all his smiles;
Frank foreheads, genial as the sun,
May hide a thousand treacherous wiles,
And tones like music's honeyed flow
May work - God knows! - the bitterest woe. Paul H. Hayne.



## ginttexampr

Manumulus autis. Natural Order: Ranuuculacea-Crowfoot Family.

 to this common plant, so beautifully characterized by the poet Robert Browning as "the little children's dower." The very name calls up the picture of children crouchng in the grass, and holding the golden blossoms under each other's chin to see if by the reflection they love butter, feeling assured that the least yellow gleam is indicative that their bread should be thickly spread with that golden and necessary product of the dairy. The leaves drop from the plant easily, and frequently the least touch will cause the petals of the flowers to fall in a golden shower.

## (1istrust.

$T$ HOU hast no truth to prove, fair Eloise;
And I say thou art false, who loved thee most;
Then spare us both these feints and artful words.
I could forgive thee if thou didst not play
The actress with me now. And now I go;
But ere I go, I'll say I $d o$ forgive thee. -Frances A. Fuller.

WHO should be trusted now, when one's right hand
Is perjur'd to the bosom? Proteus, I am sorry, I must never trust thee more, But count the world a stranger for thy sake;
The private wound is deepest. -Shakespeare.

Our doubts are traitors,
And make us lose the good we oft might win, By fearing to attempt.
-Shakespeare.
[IFE'S sunniest hours are not without
L The shadow of some lingering doubt.

- Whittier.

THIS, this has thrown a serpent to my heart,
While it o'erflowed with tenderness, with joy, With all the sweetness of exulting love; Now naught but gall is there, and burning poison. -Thompron.

O DOUBT! O doubt! I know my destiny; I feel thee fluttering bird-like in my breast; I cannot loose, but I will sing to thee, And flatter thee to rest.

There is no certainty, "my bosom's guest,"
No proving for the things whereof ye wot; For, like the dead to sight unmanifest,

They are, and they are not. - fean Ingelow.

## 



——cスか大
LORISTS have had their interest much aroused by a very expensive class of plants called Orchids，partly on account of their curious and beautiful flowers，and partly because of their strange manner of growth and individual appear－ ance．They are divided into two classes，terrestrial and aerial． The aerial ones are confined chiefly to tropical climates， some growing in damp woods，resting on trees，while others are found on dripping rocks among mountains and near water courses． The large Butterfly Orchis is one among the finest of that family known as Oncidium，and is a native of Trinidad．The blossom has the form of a butterfly，from which it takes its specific name papilio， a Latin word having the same significance．In color the flower is of a dark brown striped or barred with yellow．The large projection，called the lip，is yellow at the center with a brown edge or margin．The flowers come successively from the old flower－stems for years，one coming continuously to supply the place of the faded one．

## Guictry．

 The soul＇s calm sunshine，and the heartfelt joy．

- Pope.

THE valley rings with mirth and jor， Among the hills the echoes play
A never，never ending song，
To welcome in the May．
The magpie chatters with delight；
The mountain raven＇s youngling brood

Have left the mother and the nest；
And they go rambling east and west In search of their own food；
Or through the glittering vapors dart，
In very wantonness of heart． －Wordsworth．

THE weak have remedies，the wise have joys； Superior wisdom is superior bliss．－Young．

A LITTLE of thy merriment，
－Of thy sparkling light content， Give me，my cheerful brook，－

That I may still be full of glee

And gladsomeness where＇er I he， Though fickle fate hath prison＇d me In some neglected nook．
－Lovell．



## びactus-swaric.

## Terms tlagelliformis. Natcral Order: Cactacea-Cactus Family.



HIP or Snake Cactus, as it is familiarly called, is from the arid plains of South America. The stem is about half an Heminch in diameter, having ten angles, and attaining the - length of five or six feet. It is much too frail to stand alone, and should be supported on a trellis or tied to an upright stick. The flowers are extremely handsome, coming out from the clusters of spines that adorn the stem. The tube is long and slender, and the petals a brilliant pink, remaining in perfection a number of days, when they are succeeded continuously by others for several weeks.

## You

FEEL my sinews slacken'd with the fright,
And a cold sweat thrills down all o'er my limbs, As if I were dissolving into water. -Dryden.

WHEN the sun sets, shadows that show'd at noon But small appear most long and terrible; So when we think fate hovers o'er our heads, Our apprehensions shoot beyond all bounds. -Lee.

HIS hand did quake
And tremble like a leaf of aspen green, And troubled blood through his pale face was seen As it a running messenger had been. -Spenser.

NEXT him was fear, all arm'd from top to toe, Yet thought himself not safe enough thereby, But fear'd each shadow moring to or fro, And his own arms when glittering he did spy, Or clashing heard, he fast away did fly; As ashes pale of hue, and wingéd heel'd, And evermore on danger fix'd his eye, 'Gainst whom he always bent a brazen shield, Which his right hand unarmed fearfully did wield.
-Spenser.


AM fearful; wherefore frowns he thus?
'Tis an aspect of terror. All 's not well. --shakespeare.


## dalla Itily.

Mithaudia Aethiopita. Natural Order: Aracea-Arum Family.


I AM come, I am come! from the purple-browed sky,
The spirit of beauty to thee;
I ride on the wings of the rose-scented air,
I sit on the lips of the violet fair, And weave me a wreath of the sun's golden hair, As his tresses go glancingly by,

And glimmer the foam of the sea. -Carlos D. Stuart.


Sat fair proportion'd on her polish'd limbs, Veil'd in a simple robe, their hest attire, Beyond the pomp of dress; for loveliness

Needs not the foreign aid of ornament, But is, when unadorn'd, adorn'd the most; Thoughtless of benuty, she was Beauty's self, Recluse amid the close embowering woods.
-Thompson.

I NEVER saw aught like to what thou art,
A spirit so peculiar in its mold,
With so much wildness and with yet a part
Of all the softer beauties we behold.
-Frances A. Fuller.

## (1) Mycintlyws.

©alucmuthus flotidus. Natural Order: Calycanthacea-Calycanth Family.

 UR Southern States, more especially the Carolinas, are the native seats of this fragrant shrub, whence it is sometimes called Carolina Allspice. It is generally found in fertile soils along water courses, is of a straggling growth, and does not attain a very great height-usually from three to four feet beries, where it has received the praise of many for the odor of its blossoms, which have a strawberry or fruit-like fragrance. The bark when broken also exhales a spicy perfume. The flowers are of a dull, lurid purple, and bloom on very short stems.

## 

0BLESSED bounty, giving all content! The only fautress of all noble arts, That lend'st success to every good intent, A grace that rests in the most godlike hearts, By heav'n to none but fiappy souls infused, Pity it is that e'er thou wast abused.

> --Drayton.

HOW few, like thee, inquire the wretched out, And court the offices of soft humanity! Like thee, reserve their raiment for the naked, Reach out their bread to feed the crying orphan, Or mix the pitying tears with those that weep!

HALF his earn'd pittance to poor neighbors went: They had his alms, and he had his content. - Walter Harte.
$\Gamma$ ROM thy new hope, and from thy growing store, Now lend assistance, and relieve the poor.
-Rozve.
-Dryden.
CODLIKE his unwearied bounty fiows;
First loves to do, then loves the good he does.

> -Sir 7. Denham.

He that's liberal
To all alike may do good by chance, But never out of judgment.
-Beaumont and Fletcher.

For his bounty,
There was no winter in't; an autumn 'twas, That grew the more by reaping.
-Shakespeare.

## famcllia,

Uamellia Japmica. Natural Order: Camelliacea-Tea Family.



APAN is the original habitat of this shrub, whence its name in part-Japonica, Japanese; while the first part is derived from the German botanist, Kamel, Latinized into Camellus. It is a native of China, as well as of Japan, where it grows to a large tree. It is graceful and handsome as one could desire for any place or occasion. Its blossoms are among the loveliest that nature yields, but lack the fragrance of those of its rival, the rose, which they much resemble; they are, however, more stately, the petals being much thicker, more waxy and symmetrical. There are, it is said, now nearly a thousand varieties, chiefly derived from seed. In order to perpetuate the same variety in color, they are propagated from slips.

## Perfert Sometitess.

NE'ER shall thy dangerous gifts these brows adorn,
To me more dear than all their rich perfume,
The chaste Camellia's pure and spotless bloom,
That boasts no fragrance and conceals no thorn.
-Wm. Roscoe.
> $S^{H E}$, the gayest, sweetest blossom, Smiling 'neath the summer skies, Glorious lips and swelling bosom, Golden hair and sparkling eyes,

Softly breathing amorous sighs, While the doves around are cooing, And the simple lovers wooing, Holds the moonbeams in surprise.
-Carlos D. Stuart.

F ACH ornament about her seemly lies,
E By curious chance, or careless art, composed.
-Tasso.

THE fairness of her face no tongue can tell, For she the daughters of all women's race, And angels eke, in beautie doth excel, Sparkled on her from God's own glorious face,

And more increast by her own goodly grace, That it doth far exceed all human thought, Ne can on earth compared be to aught.
-Spenser.


## Candytuft.

Ilberis mubelleta. Natural Order: Cruciferce-Mustard Family.


BERIS, or Candytuft, is so well adapted for bouquets that an ample bed of it should be found in every garden, for it will bear any amount of clipping and still yield an abundance of flowers until destroyed by frost. The plants bear removal so poorly that it is best to sow them where they are to bloom, and to pull up all the superfluous ones. It is a native of Spain, and takes its name from the ancient appellative of that country, which was Iberia. It is most excellent for winter use, grown in pots or in vases; and is also planted as a border in flower gardens. The flowers are white, purple or crimson, and some of them are very fragrant.

## Arthitecture

IN the well-framed models, With emblematic skill and mystic order, Thou show'dst where tow'rs on battlements should rise; Where gates should open, or where walls should compass. -Prior.

$0^{0}$UR fateres next, in architecture skilid, Cities for use, and forts for safety, build;

- Then palaces and lofty domes arose; These for devotion, and for pleasure those. $-\operatorname{Sir}$ R. Blackmore.

WESTWARD a pompous frontispiece appear'd,
On Doric pillars of white marhle rear'd, On Doric pillars of white marhle rear'd, Crown'd with an architrave of antique mold, And sculpture rising on the roughen'd gold.
-Pope.

IS son builds on, and never is content Till the last farthing is in structure spent. -Drvden.

HERE stair on stair, with heavy balustrade, And columned hybrids cut in rigid stone, And vase, and sphinx, and obelisk, arrayed,
And arched wide bridges over wheelways thrown. Valleys of heaven the gardens seemed to be, Or isles of cloudland in a sunset sea.

IET my due feet never fail
To walk the studious cloister's pale, And love the high embowed roof, With antique pillars massy proof; And storied windows richly dight, Casting a dim, religious light.


## findaminc.

Uardamiug hirsuta. Natural Order: Crucifera-Mustard Family.



ROWING wild, this plant is found in various parts of the United States, in some instances adding the name of the State in which the variety is produced to its own. It is also called Cuckoo Flower, and Bitter Cress. It flourishes in wet places, near streams or springs. The flowers are white and small. The blossoms of some of the other species are larger than the above, and are frequently rose or purple in color. Its name is derived from kardia, heart, and damao, to overcome, alluding to some supposed medicinal properties.

## 

0H ! blest is the fate of the one who hath found
Some loadstar to guide Some loadstar to guide through the wilderriess round; And such I have found, my beloved one, in thee, For thou art the star of the desert to me. -Samuel Lover.

'T1IS his one hope - all else that round his life So fairly circles, scarce he values now;
The pride of name, a lot with blessings rife, Determined friends, great gifts that him endow Are shrunk to nothing in a woman's smile; Counsel, reproof, entreaty, all are lost Like windy waters, which their strength exhaust

DO but look on her eyes! they do light All that Love's world compriseth!
Do but look on her hair! it is bright As Love's star when it riseth!
Do hut mark - her forehead's smoother Than words that sooth her!
And from her arched brows such a grace Sheds itself through the face,
As alone there triumphs to the life,
All the gain, all the good of the elements' strife.
-7onson.

And leave no impress; worldly lips revile With sneer and stinging jibe, but idly by, Unfelt, unheard, the impatient arrows fly; Careless he joins a parasitic train, Fops, fools and flatterers, whom her arts enchain, Nor counts aught base that may to her pertain; Immersed in love - or what he deems is such. - F. G. Tuckerman.
$\bigcap^{H!}$ then speak, thou fairest fair! Kill not him that vows to serve thee; But perfume this neighboring air Else dull silence sure will starve me; 'Tis a word that's quickly spoken, Which, being restrained, a heart is broken. -Beaumont and Fletrher.
$A^{\text {LL nature fades extinct; and she alone }}$ Heard, felt and seen, possesses every thought, Fills every sense, and pants in every vein.


## darnation.

Mimethus favuphpllus. Natural Order: Caryophyllacea-Pink Family.


MONG the most delightful of all our flowers are the Carnations, in all their diverse colors, being called the flower of Jove or Jupiter, the chief god among the Romans, whence its name - Dios, of Zeus, or Jupiter, and anthos, a flower; the , 2 distinctive epithet is also from two other Greek words,萖客karuon, a nut, and phyllon, a leaf. They are variously called bizarres, flakes, or picotees, according to their colors and markings, being spotted, striped or plain. The varieties number, it is said, over four hundred, and many of them yield the exquisite odor of the clove, or other sweet perfume.

## Cuntempt.

$A^{N D}$ where his frown of hatred darkly fell, Hope withering fled - and mercy sigh'd farewell!
-Byron.

HARSH scorn hath hail'd thy blighted name, Thou frail but lovely thing;
And the precious flower of fame
Is slowly withering!

CHALL it not be scorn to me
To harp on such a molder'd string?
I am sham'd through all my nature
To have lov'd so slight a thing. -Tennyson.
$T$ HINK not there is no smile I can bestow upon thee. There is a smile, A smile of nature too, which I can spare, And yet perhaps thou wilt not thank me for it.

\author{

- Foanna Baillie.
}

TAKE back, take back thy promises;
Take back, take back thy love,
They say 'tis all ideal bliss
Fleeting as sunbeams move;
And that 'twill quickly pass away,
And not a chord remain

To vibrate at affection's touch, With such sweet joy again. Then give me back the light, warm heart I held in youth's bright morn; It can't endure indifference, 'Twould break beneath thy scorn.
-Mrs. Locke.
THENCE! Leave my door!
I know thee not, dark woman! Hence away! -Mrs. Sigourney.

## (fatehtin.

Silene Armeria. Natural Order: Caryophyllacea-Pink Family.



ARIETIES of this plant to the number of about one hundred, of which perhaps a dozen are indigenous to the United States, have been noted by botanists. It is cultivated as a garden annual, many varieties having been introduced from Europethe rose-colored from Sicily, and the red from Portugal, while
Russia has furnished a perennial species. They all bloom plentifully, and are appropriate for planting in the borders, or for rockwork. The stem is about a foot and a half high, and the flowers mostly a purplish pink, white, and red. Beneath each joint there is a glutinous substance that retains any light insect that touches it. ${ }^{=}$It derives its name from Silenus, the reputed foster-father and drunken companion of Bacchus, who, when caught asleep and encircled with a cordon of flowers by mortals, could be compelled to prophesy; so the ancient Greeks imagined.

## 7) an blyt Prismer.

HIGH walls and strong the body may confine,
And iron gates obstruct the prisoner's gaze, And massive bolts may baffle his design,

And vigilant keepers watch his devious ways; Yet scorns the immortal mind this base control!.

No chains can bind it and no cells enclose; Swifter than light it flies from pole to pole,

And in a flash from earth to heaven it goes.
-Anonymous.

0LIBERTY! the prisoner's pleasing dream, The poet's muse, his passion and his theme; Genius is thine, and thou art Fancy's nurse; Lost without thee the ennobling powers of verse; Heroic song from thy free touch acquires
Its clearest tone, the rapture it inspires. -Cowper.
$H^{E}$ gives the signal of command, He waves - he drops - the lifted hand!
It was a sound of clashing steel-
Why starts he thus? what doth he feel?
The clanking of his iron chain
Hath made him prisoner again! -Mrs. Norton.



## (1) lixmumils.

Authemis mobilis. Natural Order: Composita-Aster Family.


HERE are two species of this humble plant; the first inodorous, naturalized in fields, byways and lanes, and is called Corn Chamomile; and the second a perennial from Great Britain and other parts of Europe. It is frequently cultivated in gardens, and is well known for its strong, agreeable odor. The flowers are much used in medicine for their tonic and anodyne properties. It was called Anthemis, from anthos, Greek for flower, by reason of its profusion of flowers.

## 

IS love so very plenty in this weary world of pain, That you cannot let all else go by and trust me once again?
--Christian Reid.
$T \mathrm{HE}$ end will soon come, and tho' outcast I be,
Perhaps there is One will have pity on me; Who will to the injured His mercy extend, And be to the outcast protector and friend. $-7 . H$.S.

THEN gently scan thy brother man, Still gentler sister woman;
Though both may gang a kennie wrang, To step aside is human. -Burus.

> IS mercy! mercy!
> The mark of heav'n impress'd on human kind,
> Mercy that glads the world, deals joy around:
> Mercy that smooths the dreadful brow of power, And makes dominion light; mercy that saves, Binds up the broken beart, and heals despair. -Rozve.

COME unto me, when weary of life's burdens,
When, oh! so tired of all its hopes and fears When, 'midst the fury of the storms and tempests, Thou shalt be waiting as the heaven nears.

NAY, the divine in it lingers there still, God's care in all;
Rose leaves but drop at the beck of His will, Fetters which thrall. - Mary B. Dodre.

N mercy and justice both,
1 Through heaven and earth, so shall my glory excel, But mercy first and last shall brightest shine. -.Mitton.



## Chisaxy.

Uichorium intubus. Natural Order: Composita-Aster Family.


ERE is an oriental herb in height from two to three feet, found naturalized in fields and byways. The flowers are large and conspicuous, blooming in pairs in the axils of the leaves, and are a pale blue in color. The root is used in France, and indeed in America, for the adulteration of coffee, for which purpose it is roasted, ground, and flavored with burnt sugar. Its name is of Egyptian origin, being in Egypt called chikouryeh. $\#$ It is known in England as Succory. The Endivia variety, so called, is a native of the East Indies, and is sometimes used for salads.

## Frudent 展cunamy.

COR him light labor spread her wholesome store, Just gave what life requir'd, but gave no more;
His best companions, innocence and health;
And his best riches, ignorance of wealth.

PRUDENCE, thou virtue of the mind, by which We do consult of all that's good or evil, Conducting to felicity; direct My thoughts and actions by the rules of reason; Teach me contempt of all inferior vanities; Pride in a marble portal gilded o'er,

Assyrian carpets, chairs of ivory, The luxuries of a stupendous house, Garments perfum'd, gems valued not for use, But needless ornament; a sumptuous table, And all the baits of sense.

IOOK forward what's to come, and back what 's past;
Thy life will be with praise and prudence graced;
What loss or gain may follow, thou mayst guess; Thou then wilt be secure of the success. -Sir 7. Denham.

THE wise with prudent thought provide Against misfortune's coming tlde. -Pittacus. Think on the means, the manner and the end.

## (IInxix Astox-- domble.

$\mathfrak{U a l l i s t e p}$ hus $\mathfrak{U l}$ )juensis. Natural Order: Composite-Aster Family.


HE Chinese are exceedingly fond of flowers, and often take exquisite pains in their cultivation, the Aster being one of their especial favorites. With infinite patience they place the various colors so as to form, according to their taste, an artistic mass in gardens and pleasure grounds. The varieties now supplied by seedsmen are numerous, the colors the most perfect that one could wish, and filled with petals to the center. They bloom from midsummer until late in the autumn, or until frost sets its sharp teeth in their prodigal blossoms. $\#$ On the approach of winter, those that have unexpanded buds can be lifted and transferred to the house, and if wasted flowers are clipped will remain in bloom some time. The scientific name is derived from the Greek, and signifies beautiful crown.

## Banulti.

WHAT you desire of him, he partly begs To be desir'd to give. It much would please him, That of his fortunes you would make a staff To lean upon.
-Shakespeare.

IARGE was his bounty, and his soul sincere;
L. Heaven did a recompense as largely send; He gave to misery all he had - a tear; He gain'd from heav'n-'twas all he wished, a friend.
-Gray.

I N all places, then, and in all seasons,
1 Flowers expand their light and soul-like wings, Teaching us, by most persuasive reasons, How akin they are to human things. -Longefellozu.

CUCH moderation with thy bounty join
That thou may'st nothing give that is not thine to give.
-Denham.

A
ND, more than all, ye speak
Of might and power, of mercy, of the One Eternal, who hath strew'd you fair and meek, To glisten in the sun;

To gladden all the earth
With bright and beauteous emblems of His grace. That showers its gifts of uricomputed worth In every clime and place. -Mary Ame Browne.

## (1Hxin stox--Single.

$\mathbb{U a l l i s t e p h} \mathfrak{u s} \mathfrak{C l}$ finelisis. Natural Order: Composita-Aster Family.

$\cdots$

TION of this flower would be unnecessary, were it not the progenitor of all our handsome double, quilled, bouquet, pyramid and the many other varieties of asters that have originated under careful and discriminating cultivation. The blossom originally presented a yellow disk or center, surrounded by a single row of petals, of a purple color ; now we have nearly all colors and shades, except yellow. Such is the wonderful power of human thought, skill, patience and perseverance, when applied to flowers; who can doubt its equal power when enlisted in the elevation of mankind or in the improvement of the individual.

## 

> OVE'S heralds should be thoughts,
> Which ten times faster glide than sunbeams, Driving back the shadows over lowering hills.

-Shakespeare.

R OSE leaves, when the rose is dead, And so thy thoughts, when thou art gone, Love itself shall slumber on. -Shelly.

THOUGHTS of my soul, how swift ye go! Swift as the eagle's glance of fire,
Or arrows from the archer's bow,
To the far aim of your desire! -Whittier.

THE car without horses, the car without wings,
Roars onward and flies
On its pale iron edge,
'Neath the heat of a thought sitting still in our eyes.
-Miss Barrett.

THOUGHTS flit and flutter through the mind,
As o'er the waves the shifting wind;
Trackless and traceless is their flight,
As falling stars of yesternight, Or the old tidemarks on the shore,
Which other tides have rippled o'er. Bozuring.

ANY are the thoughts that come to me In my lonely musing;
And they drift so strange and swift,
There 's no time for choosing
Which to follow, for to leave
Any, seems a losing.
-C. P. Crauch.

## (fhxysintliemam.



## Sfigtried Rffectionts.

> COUL, wilt thou love, where to love is losing?
> Long wilt thou wander in ways that err;
> Dally with hopes, that thy barren choosing
> Finds fleeting as steps of a wayfarer.
> Wilt thou not turn and say to her spirit,
> Lo! I that love thee will love no more?
> This is a hard thing that we inherit;
> To love and to weep, lo! this is sore. -Barton Grey.

W AN brightener of the fading year, Chrysanthemum;
Rough teller of the winter near, Chrysanthemum:
Gray, low-hung skies and woodlands sere, Wet, leaf-strewn ways with thee appear;
Yet well I love to see thee here, Chrysanthemum!
Yes, well I love to see thee here, Chrysanthemum!

> Thou comest when the rose is dead, Chrysanthemum -
> When pink and lily both have fled, Chrysanthemum:
> When hollyhocks droop low the head, And dahlias litter path and bed, Thou bloomest bright in all their stead, Chrysanthemum,
> And back recall'st their beauty fled.


## Citron.

Situs media. Natural Order: Auranticer-Orange Family.

${ }^{2} \mathrm{IGHT}$ or nine feet high in its native seats in tropical climates, the Citron differs but slightly in appearance from the lemon and orange trees, with which we are familiar, though only as house shrubs. The foliage is evergreen, the flowers resembling the orange blossom; the fruit is fragrant, the pulp being acid like the lemon, and grateful and cooling to the taste. The trees of this class are all easily grown in the conservatory, and in Louisiana and Florida in the open air, yielding a delightful perfume when in bloom. $=$ It gets its distinctive title, media, from the two essential oils (citron and cedrat) which it yields.

$$
\begin{aligned}
& \mathrm{N}^{\mathrm{O} \text { power in death shall tear our names apart, }} \\
& \text { As none in life could rend thee from my heart. }
\end{aligned}
$$

-Byron.

COME from the woods with the citron flowers,
Come with your lyres for festal hours, Maids of bright Scio! They came, and the breeze Bore their sweet songs o'er the Grecian seas; They came, and Endora stood robed and crowned The bride of the morn, with her train around.
-Mrs. Hemans.

WHEN on thy bosom I recline, Enraptured still to call thee mine,
To call thee mine for life, I glory in the sacred ties, Which modern wits and fools despise,

Of husband and of wife. -Kindly Murray.
$T H E$ citron groves their fruit and flowers were strewing Around a Moorish palace, while the sigh
Of low, sweet summer winds the branches wooing
With music through their shadowy bowers went by;
Music and voices from the marble halls
Through the leaves gleaming, and the fountain falls.

- Mrs. Hemans.
$A^{\text {CROSS }}$ the threshold led,
And every tear kissed off as soon as shed, His house she enters, there to be a light

Shining within, when all without is night;
A guardian angel o'er his life presiding, Doubling his pleasure, and his cares dividing.

## Clianthms.

Clianthas 边ampieri. Natural Order: Leguminosa-Pulse Family.


HER eyes, her lips, her cheeks, her shape, her features, Seem to be drawn by love's own hands, by love Himself in love.

THE beautiful are never desolate,
But some one always loves them, -Bailey.

HEART on her lips, and soul within her eyes, Soft as her clime, and sunny as her skies.

HER grace of motion and of look, the smooth
And swimming majesty of step and tread,
The symmetry of form and feature, set
The soul afloat, even like delicious airs Of flute or harp.
-Miman.

CHE has such wondrous eyes, The saints in paradise
Must veil their own from her.
Around her snow-white neck
Great pearls, like foam-bells fleck,

The lustrous depths that stir
With rhythmic rise and fall,
To hide her heart from all-
$I$ hold a hidden key
To ope the gates, ma mie!
-Edward Renaud.

## (1) lothox.

Xauthinum strumarium. Natural Order: Composita-Aster Family.

 $\qquad$
IKE some of the human family, certain plants have but very little biography, and what they have is not very favorable. They necessarily have had progenitors or ancestors, but not the illustrious, the noted, the famous; neither have they beauty or attractions sufficient to redeem them from obscurity. The Clotbur resembles the burdock, the Spanish needles, and some others of those provoking plants that scatter their seeds by adhering to whatever comes in contact, which they do readily by the hooked spines with which they are provided. They are mostly coarse plants, found in byways, fields, woods and barnyards.

## Setraction.

DETRACTION is a bold monster, and fears not To wound the fame of princes, if it find But any blemish in their lives to work on. -Massinger.
' $T$ IS not the wholesome, sharp morality, Or modest anger of a satiric spirit, That hurts or wounds the body of a State; But the sinister application

Of the malicious, ignorant and base Interpreter; who will distort, and strain The gen'ral scope and purpose of an author To his particular and private spleen. -Fonson.

VIRTUE itself 'scapes not calumnious strokes;
The canker galls the infants of the spring,
For oft before their blossoms be disclos'd, And in the morn and liquid dew of youth, Contagious blastments are most imminent.

$\mathrm{N}^{\mathrm{N}}$O skill in swordmanship, however just, Can be secure against a madman's thrust; And even virtue so unfairly match'd, Although immortal, may be prick'd or scratch'd.

- Cozuper.

T'M one whose whip of steel can with a lash Imprint the characters of shame so deep, Ev'n in the brazen forehead of proud sin, That not eternity shall wear it out.


## (10) brax.

Uabea scaldens. Natural Order: Polemoniacea-Polemonium Family.


LIMBING COBÆA, so called from Barnabas Cobo, a Spanish missionary in Mexico (whence the common species has been introduced), is a very luxuriant and beautiful plant, often growing a hundred and fifty feet or more in a single season. The most common kind produces large, bell-shaped flowers, nearly the size of a teacup, which when they first appear are a pale green, changing gradually to a beautiful dark purple under the influence of the sun and air. There is also a variegated kind, and very recently a white variety has been introduced. The seeds are large and flat, and should be planted edgewise, as, if placed flat, they are apt to rot before sprouting. It can be cultivated as an annual, or as a permanent house-plant; in either case care should be taken in pruning if entirely cut back, to see that there are young shoots sprouting from the root near the earth, to absorb the superfluity of sap, or the plant will perish.

## 6assip.

TALKERS are no good doers; be assured We go to use our hands, and not our tongues.
-Shakespeare.

CWEET were the tales she used to tell
WWhen summer's eve was dear to us,
And fading from the darkening dell, The glory of the sunset fell.
-Whittier.
$\boldsymbol{I}$ NEVER with important air In conversation overbear:
My tongue within my lips I rein;
For who talks much must talk in vain. -Gay.

V Y lord shall never rest;
I'll watch him tame, and talk him out.
-Shakespeare.

AMIRTH-MOVING jest, Which his fair tongue, conceit's expositor, Delivers in such apt and gracious words That aged ears play truant at his tales. -Shakespeare.

HOW hard soe'er it be to bridle wit,
Yet memory oft no less requires the bit.
How many, hurried by its force away, Forever in the land of gossips stray!
-Stillingfleet.

## (1)

Uelosia cristata. Natural Order: Amarantacea-Amaranth Family.

## 

$\mathrm{O}^{\mathrm{H}}$ ! save me, ye powers, from these pinks of the nation,
These tea-table heroes! these lords of creation. --Salmagundi.

COME positive, persisting fops we know,
Who, if once wrong, will needs be always so; But you with pleasure own your errors past, And make each day a critique on the last. -Pope.

COXCOMBS are of all ranks and kind, They're not to sex or age confined; Of rich, or poor, or great, or small, 'Tis vanity besets them all. -Gay.

$$
\begin{aligned}
& S_{\text {HINE out, fair sun, till I have bought a glass, }}^{\text {'That I may see my shadow as I pass. -Shakespeare. }}
\end{aligned}
$$


'RY morning does
This fellow put himself upon the rack, With putting on 's apparel, and manfully Endures his tailor, when he screws and wrests His body into the fashion of his doublet. -Shirley.

COPS take a world of pains
To prove that bodies may e The former so fantastically dress'd, The latter's absence may be safely guess'd.
-Park Benjaninin.

NATURE made ev'ry fop to plague his brother, Just as one beauty mortifies another. -Pope.

## Colmmirxime.

Aquilegia Camaileısis. Natural Order: Ranunculacee-Crowfoot Family.


FAME 'S but a hollow echo; gold, pure clay;
Honor, the darling of but one short day; Beauty, the eye's idol, but a damask'd skin; State, but a golden prison to live in.

## -Sir Henry Wotten.

Tafty.
EAVE such to trifle with more grace and ease,
Whom folly pleases, or whose follies please. -Pope.

WHAT is social company
But a babbling summer stream?
What our wise philosophy
But the glancing of a dream?
-Christopher Pearse Cranch.

0THERS the siren sisters compass 'round, And empty heads console - with empty sound.

$$
- \text { Pope. }
$$

$\mathrm{H}^{\mathrm{s}}$IS passion for absurdity 's so strong, He cannot bear a rival in the wrong, Tho' wrong the mode comply: more sense is shown In wearing others' follies than our own.

T'HE morning's blush, she made it thine, The morn's sweet breath, she gave it thee; And in thy look, my Columbine!

Each fond-remember'd spot she bade me see. - Fones rerv.

TOO many giddy, foolish hours are gone, And in fantastic measures danced away.
-Rozue.


THEIR passions move in lower spheres, Where'er caprice or folly steers. - Swift.

THUS in a sea of follies toss'd, My choicest hours of life are lost.


## (1)

Uoriamurum sativum. Natural Order: Umbellifere-Parsley Family.


ORTIONS of Southern Europe along the coast of the Mediterranean, and the East generally, are the native seats of the Coriander in a wild state; but the cultivated varieties are to be found in all countries. The seeds, for which it is grown, are very aromatic, and are used by confectioners in manufacturing many of their sweets, they being passed through some process by which their exterior is covered with a coating of sugar, each seed still retaining its individuality. $\#$ The leaves of the plant are much divided; the flowers are white, grouped in umbels, and bloom in the month of July.

## Derit.

$T \begin{gathered}\text { HE sweet eye-glances that like arrows glide, } \\ \text { The charming smiles that rob sense from the }\end{gathered}$
The charming smiles that rob sense from the heart, The lovely pleasaunce, and the lofty pride, Cannot expresséd be by any art. -Spenser.
(H! how much more doth beauty beauteous seem
By that sweet ornament which truth doth give!
The rose looks fair, but fairer we it deem
For that sweet odor which doth in it live.
-Shakespeare.

HAPPEN what there can, I will be just; My fortune may forsake me, not my virtue: That shall go with me and before me still, And glad me doing well, though I hear ill. - Forson.

HERE only merit constant pay receives;
Is blest in what it takes, and what it gives.

- Pope.

THE noble mind, unconscious of a fault,
No fortune's frown can bend, or smiles exalt.
HE fame that a man wins himself, is best;
That he may call his own.
-Middleton.
BE thou the first, true merit to befriend;
His praise is lost who waits till all commend.
-Pope.

To wear undeserved dignity. -Shakespeare.

## 

Agrostemma githago. Natural Order: Caryophyllacea-Pink Family.


ROWING uncultivated in fields of grain, this plant is nearly allied to the species of Lychnis that are grown in the flower garden. The stem is from two to three feet high, with foliage of a pale green, and the leaves three or four inches in length. The flowers are rather pretty, though not brilliant, being in color somewhat of a dull purple. Its name, Agrostemma, signifies crown of the field, derived from the Greek; and the epithet githago is allied to gith, the Welsh name for Corn Cockle.

## 

0
FATAL beauty! why art thou bestow'd
On hapless woman still to make her wretched? Betrayed by thee, how many are undone. -Patterson.

$\mathrm{B}^{\mathrm{E}}$EAUTY, like ice, our footing does betray; Who can tread sure on the smooth, slip'ry way? Pleased with the passage, we glide swiftly on, And see the dangers which we cannot shun.
'TIS not a set of features or complexion The tincture of a skin I admire, Beauty soon grows familiar to the lover, Fades in his eye, and palls upon the sense.

WHY did the gods give thee a heavenly form, And earthly thoughts to make thee proud of it?
Why do I ask? 'Tis now the known disease That beauty hath, to bear too deep a sense Of her own self-conceived excellence. -Fonson.

BEAUTY, my lord, 'tis the worst part of woman, A weak, poor thing, assaulted ev'ry hour By creeping minutes of defacing time; A superficies, which each breath of care Blasts off; and ev'ry hum'rous stream of grief, Which flows from forth these fountains of our eyes Washeth away, as rain doth winter's snow. -Goffe.

THINK not, 'cause men flat'ring say, Y' are fresh as April, sweet as May, Bright as the morning star, That you are. -Carew. BEAUTY is excell'd by manly grace, And wisdom, which alone is truly fair. -Milton.

EAUTY, fair flower, upon the surface lies,
But worth with beauty soon in aspect vies. -Safpho.

## (11)

Uoronilla glaua. Natural Order: Leguminosie - Pulse Family.
———ccicx 950
(fORONILLA is a shrubby plant growing to some three or four feet in height, and blossoms freely and early in the greenhouse or window. There are but few varieties, none of which are natives, being all of European origin. Three produce yellow flowers; the Coronilla varia has purple ones; and the Coronilla Emerus, frequently called Scorpion senna, a native of France, has blossoms of a rose color. They should have partial shade in summer, and be grown in a light, open soil well drained. The significance of the name is a little crown, from the shape of the flower.

## Sumess Craum Your existies.

OOD actions crown themselves with lasting bays,
I who denerves well needs not another's praise.

> -Heath.

ROWN'D with my constellated stars I stand
Beside the foaming sea,
And from the Future with a victor's hand,
Clain empire for the Free. - Bayard Taylor.

0SUCH a day, So fought, so follow'd, and so fairly won, Came not till now, to dignify the times, Since Cæsar's fortunes.

THUS far our fortune keeps an onward course, And we are graced with wreaths of victory.
-Shakespeare.

1 PPLAU'SE waits on succens: the fickle multitude,
I Like the light straw that floats along the stream, Glide with the current still, and follow fortune.
$\Gamma \mathrm{O}$ do is to succeed-our fight Is wag'd in Heaven's approving sight The smile of God is victory.

$$
\text { - } H^{\top} \text { hittier. }
$$

-Dryden.

WISDOM he has, and to his wisdom courage; Temper to that, and unto all success.
-Sir 7. Denhan.

CUCCESS, the mark no mortal wit, Or surest hand, can always hit.
-Butler:

## (ilotton SiPlint.

$\mathfrak{G}$ ossppium herbaceum. Natural Order: Malvacea-Mallow Family.



## Greatuest.

A some tall cliff, that lifts its awful form,
Swells from the vale, and midway leaves the storm;
Tho' round its breast the rolling clouds are spread,
Eternal sunshine settles on its head.
-Goldsuith.

IVES of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time;-

Footprints, that perhaps another, Sailing o'er life's solemn main,
A forlorn and shipwreck'd brother, Seeing, shall take heart again.
-Longfellow.
$\Theta^{\mathrm{H} \text { ! greatness, thou art but a flattering dream, }}$ A wat'ry bubble, lighter than the air. -Tracy.

CREAT souls by instinct to each other turn, Demand alliance and in friendship burn. -Addison.

98 None think the great unhappy, but the great.

## （xambexwy．

（1）encoctus palustris．Natural Order：Evicacue－Heath Family．

${ }_{2}$ EARLY every one is familiar with the handsome，bright and ${ }^{3}$ glossy fruit of the Cranberry，which is so frequently exposed for sale in our markets，and from which such luscious jellies and appetizing tarts are concocted．The literal translation from the Greek would be sour－berry，from oxus，acid，and kokkos，berry，than which nothing could be more appropriate． It is also called moss－berry，or moor－berry，as it thrives best in low， boggy grounds，such as will－o＇－the－wisp delights to dance over，and where the soil sucks up water like a sponge．The shrub being procumbent，or trailing，creeps along the ground，and under cultiva－ tion forms dense masses，yielding an abundant product．$\dagger^{\prime}$ The flowers are of a light pink，and are clustered near the tips of the branches． There is also a variety called the Upland Cranberry．

## 置却亩ifinat．

$T$ HE mind I sway by，and the heart I bear，
Shall never sagg with doubt，nor shake with fear．
－Shakespeare．

A MIGHTY man is he，
With large and sinewy hands；
And the muscles of his brawny arms
Are strong as iron bands．

UPON his ample shoulders Clangs loud the four－fold shield， And in his hand he shakes the brand Which none but he can wield．
－Lord Macauley．

ET fortune empty all her quiver on me，
1．I have a soul that，like an ample shield， Can take it all，and verge enough for more．
-Dryden.

IKE a mountain lone and bleak，
With its sky－encompass＇d peak，
Thunder riven，
Lifting its forehead bare，

Through the cold and blighting air，． Up to heaven，
Is the soul that feels its woe， And is nerved to bear the blow．
－Mrs．Hale．

## (1xape tuxtle.

Aagerstramia Judia. Natural Order: Lythracea-Loosestrife Family.



WEDEN was the birthplace of Magnus Lagerstrom, the noted traveler and botanist for whom this beautiful exotic shrub was named, and as it was supposed to have come originally from the East Indies, the qualifying adjective, Indica, was added. The petals of the flowers are very delicate, and are attached to the calyx by long, slender claws, which give it a light and airy appearance. The shrub is frequently found in the Southern States, where it is quite hardy, but in the northern section of the United States it is found only in conservatories. Very recently a white-blooming plant was found in Arkansas, growing wild; it being the first discovered of that color, it was of course very choice, and was at once removed by an enthusiastic amateur for propagation.

## 

ETHOUGHT I heard a voice
Sweet as the shepherd's pipe upon the mountains
When all his little flock's at feed before him. -otway.

0H! I know
Thou hast a tongue to charm the wildest temper; Herds would forget to graze, and savage beasts Stand still, and lose their fierceness, but to hear thee, As if they had reflection; and by reason Forsook a less enjoyment for a greater. -Rozue.
$H^{\text {IS }}$ eloquence is classic in its style, Not brilliant with explosive cornscations Of heterogeneous thoughts, at random caught, And scattered like a shower of shooting stars, That end in darkness; no-his noble mind Is clear, and full, and stately, and serene.

THE charm of eloquence - the skill
To wake each secret string, And from the bosom's chords at will Life's mournful music bring;

The o'ermastering strength of mind, which sways The haughty and the free,
Whose might earth's mightiest ones obey; This charm was given to thee.



## (1)wincan.

Uuphea viscosissima. Natural Order: Lythracea-Loosestrife Family.

${ }^{4}$ ET grounds in some parts of the United States produce this 0 annual, the stems and calyx of which are covered with a wiscid or gummy substance, whence the epithet viscosis.osima, while the Greek word kuphea denotes gibbous or curved, from the shape of the calyx. The flowers appear gly at the axils of the leaves, the seed capsule bursting before ripe. The Cuphea platycentra (broad-centered) is a foreign variety grown as a house plant, which blooms profusely at all seasons, and accomodates itself to nearly all locations. Its flowers are small, scarlet, and tubular, with a black and white tip.

## 

$D_{\text {OST thou so hunger for my empty chair, }}^{\text {OSt }}$,
That thou wilt needs invest thee with my honors Before thy hour be ripe? -Shakespeare.

O NOTHING rash, my sire! By all that 's good Let me invoke thee - no precipitation. -Coleridge.
${ }^{6}$ NAY, let me in," said she,
"Before the rest are free,
In my loneness, in my loneness, All the fairer for that oneness. For I would lonely stand, Uplifting my white hand,

On a mission, on a mission, To declare the coming vision.
See mine, a holy heart,
To high ends set apart,All unmated, all unmated, Because so consecrated."
-Elizabeth Barrett Browning.

CPREAD the sails! behold!
DThe sinking moon is like a watchtower hlazing
Over the mountain yet;-the City of Gold
Yon cape alone does from the sight withhold;
The stream is fleet - the north breathes steadily
Beneath the stars, they tremble with the cold!
Ye cannot rest upon the dreary sea!-
Haste, haste to the warm home of happy destiny.
-Shelly.

## (1xxrant.

lhibes rubrum. Natural Order: Grossulariacea-Currant Family.


OTANICALLY named from a misapplied Arabic word, and vernacularly from Corinth in Greece, with which it has no special connection, while even the qualifying Latin epithet, rubrum (red) is a misnomer, as not only red but white currants are included, it must be confessed this excellent shrub has been unfortunate in its godfathers. It is, however, quite $\mathrm{g}^{\mathrm{g}}$ familiar to everyone, or if not they have missed one of the blisses of childhood in lying under its branches to pluck the bright, gleaming fruit, hanging like strung rubies in such clusters and bountiful abundance, filled with a healthful and agreeable wine-like juice. The flowers are a delicate green, and would be pretty if of some brilliant tint. The yellow Currant, that grows wild in Missouri and Oregon, is grown as a garden shrub, for the bright and cheering flowers that appear so early in springtime, and like the robin, are among nature's earliest harbingers of her awakening, and of earth's returning joy.

## Yan Mentaq Mff.

HER every tone is music's own, like those of morning birds, And something more than melody dwells ever in her words; The coinage of her heart are they, and from her lips each flows, As one may see the burden'd bee forth issue from the rose.
-Edward C. Pinkney.

THY words had such a melting flow, And spoke the truth so sweetly well, They drop'd like heaven's serenest snow, And all was brightness where they fell!
-Moore.
$A^{H!}$ simple is the spell, I ween, That doth that grace impart; It dweils its own sweet self withinIt is - a loving heart! -Mrs. Osgood.
$A^{\text {LL }}$ are lovely, all blossom of heart and of mind; All true to their natures, as Nature designed;
To cheer and to solace, to strengthen, caress, And with love that can die not to buoy and to bless.
-William Howitt.
104

## (1) yolamen.

OUflamen Mersidm. Natural. Order: Primulacea-Primrose Family.
——ccect fore


ERSIA gave birth to this variety of the Cyclamen, which, like the others of the same genus, is a bulbous (or, as some botanists call it, tuberous) plant, because the root or bulb is solid, like a turnip, while the true bulb is composed of layers, like the onion, or scales, like most lilies. In cultivation they should not be too much watered: and when not in bloom, should have less. There are but few varieties, and it is difficult to make choice of one possessing advantages above another, except in time of flowering - a few blooming in winter, others in summer. The foliage of some is rich and varied: others send up their flowers from the bare bulb before the leaves appear. The Cyclamen Persicum blooms from January to April, the C. hederæfolium from September December, and the C. Neapolitanum from July to September; so with one of each, one could have blossoms almost the whole year. The word Cyclamen comes from the Greek word kuklos, a circle, because after the flower has withered and the seed pods appear, the stalk or stem begins to curl like the tendril of a vine, until the seed vessel is drawn down to and under the ground where it ripens.

## Diffidently.

## CTILL from the sweet confusion some new grace <br> Blushed out by stealth and languished in her face.

-Eusden.
$B^{U T}$ cyclamen I choose to give,
Whose pale-white blossoms at the tips
(All else as driven snow) are pink,
And mind me of her perfect lips;
Still, till this flower is kept and old, Its worth to love is yet untold.

MY lady comes at last, Timid and stepping fast, And hastening hither. With modest eyes downcast She comes! she 's here! she 's past!

May heaven go with her!
-William Makepeace Thackery.

UNTO the ground she cast her modest eye,
And, ever and anon, with rosy red,
The bashful blush her snowy cheeks did dye. -Spenser.


## Baftodil.

ลauccissus pseniomarcisshs. Natural Order: Amaryllidacea-Amaryllis Family.

$T \begin{aligned} & \mathrm{HE} \text { champions all of high degree, } \\ & \text { Who knighthood loved, and deeds of chivalry, }\end{aligned}$
Throng'd to the lists, and envied to behold The names of others, not their own, enroll'd. -Dryden.

$M^{1}$E ye call great: mine is the firmer seat, The truer lance; but there is many a youth Now present, who will çome to all I am And overcome it; and in me there dwells No greatness, save it be some far-off touch Of greatness to know well I am not great.
-Tennyson.
$T$ HEY reel, they roll in clanging lists, And when the tide of combat stands, Perfume and flowers fall in showers, That lightly rain from ladies' hands.
-Tennyson.

$\mathrm{H}^{\mathrm{E}}$E is a man setting his fate aside, Of comely virtues:
Nor did he soil the fact with cowardice (An honor in him, which buys out his fault), But, with a noble fury, and fair spirit, Seeing his reputation touch'd to death,
He did oppose his foe. -Shakespeare.
$T \begin{gathered}\text { HE daffodil most dainty is, } \\ \text { To match with these in me }\end{gathered}$
To match with these in meetness;
The columbine compared to this,
All much alike for sweetness.
-Nichoias Drayton.
'TIS much he dares;
And to that dauntless temper of his mind, He hath a wisdom that doth guide his valor.

## Nithlia.

mablia nariabiles. Natural Order: Composita-Aster Family.




## 

maptur oblorata. Natural Order: Thymelacca-Mezereum Family.


OST of the Daphnes are from those distant climes so rich and luxuriant in all forms of vegetation, Southern Africa, China and Australia; but few of the species being disseminated in other countries. They are worthy a choice place in the greenhouse, window, or conservatory, as they bloom in the bleakest season of the year, beginning in December and lasting until spring. The foliage is beautiful and evergreen, the flowers white, abundant and fragrant. Some of the varieties have rosy purple, and the Daphne oleoides lilac, blossoms. All are highly odoriferous. The name is derived from the nymph Daphne, beloved of Apollo, who was changed into this plant to escape his pursuit.

## 

WHILE writing verses for my love, I looked up from the paper,
And there she stood! I rose in haste, and overturned the taper.
And there she stood! I rose in haste, and overturned the taper.
"How careless to put out the light!" she said. "Is it surprising,"
I answered, "that I quenched my lamp when I saw the sun arising?"

> -Heine.
$T \mathrm{O}$ gild refined gold, to paint the lily, To smooth the ice, or add another hue Unto the rainbow, or with taper light, To seek the beauteous eye of heaven to garnish, Is wasteful and ridiculous excess. -Shakespeare.

WHEN first I saw my darling's face,
I know I did not see the grace That afterward, unbidden, Seemed filling all her dainty form, As day by day, love, gently born,

Disclosed some trait long hidden. -c. c. C.

LOVELIER nymph the pencil never drew,
For the fond Graces form'd her easy mien, And heaven's soft azure in her eye was seen. -Hayley.

CHE hath the art, ma belle,
'「o praise most sweetly well,
Yet only in love's service doth she use it.

For me, between her voice
And all songs were there choice,
Always 'twould well rejoice my soul to choose it. -Edgar Fazuceth.



## Beally gightshade．

Atropa Bellainomáa．Natural Order：Solanacea－Nightshade Family．


ATE personified（not as one，but threefold）was described in ancient Greek mythology as three women with robes of ermine，as white as snow，bordered around with purple． The first is named Clotho，the second，Lachesis，and the third，Atropos（literally，not turning），because she is immuta－ Os ble and unalterable．＂To them is intrusted the manage－ \＆ment of the thread of life：for Clotho draws the thread between her fingers；Lachesis turns the wheel；and Atropos cuts the thread． That is，Clotho gives life and brings into the world，Lachesis deter－ mines the fortunes that shall befal us here，and Atropos concludes our lives．＂The flower of this plant is of a pale purple，the berries of a glossy black，freely charged with a purple juice．The whole plant is poisonous，especially the berries．Fortunately it is not naturalized in the United States．

## 具葫其．

DEATH is the crown of life：
Were death deny＇d，poor men would live in vain；
Were death deny＇d，to live would not be life； Were death deny＇d，ev＇n fools would wish to die．
－Young．

D EATH＇s but a path that must be trod， If man would ever pass to God． －Parnell．
？HE bad man＇s death is horror；but the just
Keeps something of his glory in his dust．
－Babbington．

T
CHE world recedes；it disappears！
Heav＇n opens on my eyes！my ears
With sounds seraphic ring．－Pope．

T BREATHE in the face of a maiden，
I kiss the soft mouth of a rose；
Yet not that I hate them，but love them， My black wings are spread forth above them，

And round them my pinions enclose；
I．love them so well that they die；
Yet my heart with their sorrow is laden， And sad with their cry．

## 男口uxtx．

## Uuscuta epilimuin．Natural Order：Convölvulacea－Convolvulus Family．



UROPE is the native seat of the Dodders，which are of several kinds，yet so similar in nature that the description of one gives．an idea of all．This plant is an inhabitant of the fields，being destitute of foliage，having a reddish orange stem of a parasitical nature－that is，having no power of provid－ ing nutriment for itself，as it depends upon some neighboring plant around which it twines．The root then decays，when it receives its nourishment from the plant that supports it，by means of small projecting filaments，with which it penetrates them，absorbing their juices．$\Downarrow$ This particular species grows on flax，whence its name，from the Greek epi，on，and linon，flax；the origin of the name Cuscuta is unknown．The flowers are a yellowish white．

## Batstress．

F the tears I shed were tongues，yet all too few would be，
To tell of all the treachery that thou hast shown to me．
－Bryant．

FOR vicious natures，when they once begin
To take distaste，and purpose no requital， The greater debt they owe，the more they hate．
$\uparrow \begin{gathered}\text { HE proudest of you all } \\ \text { Have been beholden to }\end{gathered}$
Have been beholden to him in his life：
Yet none of you would once plead for his life．
－Shakespenre．

> I COULD stand upright
> Against the tyranny of age and fortune； But the sad weight of such ingratitude Will crush me into earth．－Denham．

HAVE been base：
Base ev＇n to him from whom I did receive All that a son could to a father give：
Behold me punish＇d in the self－same kind； Th＇ungrateful does a more ungrateful find．

- Dryden．

$D^{1}$ISHONOR waits on perfidy．The villain Should blush to think a falsehood ；＇tis the crime Of cowards．

$$
\text { -C. } \mathcal{F} \text { ohnson. }
$$

CEE how he sets his countenance for deceit， And promises a lie before the speaks．－Dryden，


$\mathfrak{G a r a l l o r h i g a}$ oùoutorhija. Natural Order: Orchidacea-Orchis Family.



N old woods, from Canada to Carolina and Kentucky, this singular plant may be found. It consists in a collection of small, fleshy tubers, connecting and branching like coral, whence it is called Coral root, which is a literal translation of its Greek botanical name; while odontorhiza in the same language signifies tooth root. It has no leaves or verdant foliage, the flower stalk being fleshy, about a foot high, with a number of flowers in a long spike. The color of the blossom is brownish green, with a white lip spotted with purple. It usually grows in old woodlands throughout the northern and middle States.

## 貝atyert.

$G_{\text {Remain within - trust to thy household good }}^{\text {OOD }}$
And to my word for safety, if thou dost As I now counsel - but if not, thou art lost!

> -Byron.

CPEAK, speak, let terror strike slaves mute, Much danger makes great hearts most resolute. -Marston.

UE that stands upon a slippery place Makes nice of no vile hold to stay him up. -Shakespeare.

THUS have I shun'd the fire for fear of burning;
And drench'd me in the sea, where I am drown'd.
-Shakespeare.
$\int^{\text {UR dangers and delights are near allies; }}$ From the same stem the rose and prickle rise.

THE absent danger greater still appears,
Less fears he who is near the thing he fears.
-Daniel. - Aleyn.
$T \mathrm{HOU}$ little know'st
What he can brave, who, born and nurst
In danger's paths, has dared her worst!
-Moore.

$\mathrm{N}^{0}$
JOW I will unclasp a secret book,
And to your quick-conceiving discontents I'll read you matter deep and dangerous;

As full of peril and advent'rous spirit,
As to o'erwalk a current, roaring loud,
On the unsteadfast footing of a spear!

## Twaxt 刑ink。

foustonia carrulea．Natural Order：Rubiacea－Madder Family．


ILLIAM HOUSTON，M．D．，the friend and correspondent wo of the botanist Miller，has received the distinction of having步 the name of this elegant little plant changed in his honor． \％o It was formerly called Hedyotis from the Greek hedus，sweet， and oti，to the ear，from its supposed value in curing deafness． \＆Its flowers are a pale blue with a yellowish center，and when found in large patches，as it sometimes is，it gives the ground quite a cœrulean tinge．The Dwarf Pinks are found usually in low，moist grounds by the roadsides and in the fields，blooming during most of the summer． Some of the other varieties have pink or white flowers．

## 

THE bloom of opening flowers＇unsullied beauty， Softness and sweetest innocence she wears， And looks like nature in the world＇s first spring．
－Roze．
$T \mathrm{HE}$ angels watch the good and innocent， And where they gaze it must be glorious．
-Mrs. Hale. OPE may sustain，and innocence impart Her sweet specific to the fearless heart．
－Sprague．

Who knows no guilt，can sink beneath no fear．

CAIR sunbright scene！－
（Not sunny all－ah！no）－I love to dwell， Seeking repose and rest，on that green track， Your farthest verge，along whose primrose path

Danced happy childhood，hand in hand with Joy， And dove－eyed Innocence，（unwaken＇d yet Their younger sister Hope），while flowers sprang up Printing the fairy footsteps as they passed． Are free from anguish as they are from faults． －Waller．

IAM arm＇d with innocence，
Less penetrable than the steel－ribb＇d coats That harness round thy warriors．
－－Madden．

INNOCENCE shall make
False accusation blush，and tyranny Tremble at patience． －Shakespeare．


## Tetranstex,

miogpuros ebmus. Natural Order: Ebenacece-Ebony Family. The bark is crisp, jet-black, and has the appearance of being charred. Beneath the bark the wood is perfectly white until the heart is reached, which is the fine black ebony of commerce."

## 耳ingt.

CLEEP chains the earth, the bright stars glide on high,
Filling with one effulgent smile the sky;
And all is hush'd so still, so silent there,
That one might hear an angel wing the air.
-Mrs. Lewis.

$0^{\text {Hi}}$H, Night! most beautiful, most rare! Thou giv'st the heavens their holiest hue! And through the azure fields of air Bring'st down the golden dew! For thou, with breathless lips apart, Didst stand in that dim age afar, And hold upon thy trembling heart

Messiah's herald star!

NIGHT is the time when nature seems God's silent worshiper,
And ever with a chastened heart In unison with her.
I lay me on my peaceful couch, The day's dull cares resigned,
And let my heart fold up like flowers In the twilight of the mind.
-Sarah 7. Clark.


## 

$\mathfrak{G a m b u} u \mathfrak{d a n a d e n s i s . ~ N a t u r a l ~ O r d e r : ~ C a p r i f o l i a c e a - H o n e y s u c k l e ~ F a m i l y . ~}$
 as the Hylde, and in England and America as the Elder. Its scientific name is closely related to sambuca, a musical instrument of the Romans made from the wood of the Elder, triangular in shape, and crossed with strings, the music of which was held in little esteem, as its tones were sharp and shrill in quality. It is found in thickets in the United States and Canada, growing about old stumps and fence corners. The flowers are small and of a creamy white, bloom in large clusters as broad as a plate, and have a heavy, sweetish odor, though not disagreeable. The berries are round and of a dark purple color, and full of juice; they are used for pies, preserves, and also canned for winter use.

## 量路.

IN duty prompt at ev'ry call, He watch'd and wept, he prayed and felt, for all; And as a bird each fond endearment tries To tempt its new-fledged offspring to the skies, He tried each art, reproved each dull delay, Allured to brighter worlds, and led the way.
-Goldsmith.

PRESS bravely onward! not in vain
Your generous trust in human kind; The good which bloodshed could not gain Your peaceful zeal shall find.
—Whittier.

DTHERE zeal holds on its even course, Blind rage and bigotry retire:
Knowledge assists, not checks, its force, And prudence guides, not damps, its fire.
-7. Wesley.
PPREAD out earth's holiest records here,
Of days and deeds to reverence dear; A zeal like this what pious legends tell?

- Sprague.
$\bigcup^{\mathrm{N}}$ such a theme 'twere impious to be calm, Passion is reason, transport, temper, here. -roung.

7 EAL and duty are not slow, But on occasion's forelock watchful wait.


## 

## Uichorimm nloma. Natural Order: Composita-Aster Family.



CATTERED widely throughout Europe and America, though a native of the East Indies, the Endive is of the same genus as the Chicory, already described on page 82. Its name in the vernacular is a formation from the Latin name intybus. It is an annual of a hardy nature, and is often cultivated for and forms an excellent salad, but is more used abroad than in America. It is of value in medicine, possessing cooling and anti-scorbutic properties, and French physicians use it as a remedy for jaundice. The leaves are a dark green and much curled.

## 

$\mathrm{B}^{\text {ETTER to hunt in fields for health unbought, }}$ Than fee the doctor for a nauseous draught,
The wise for cure on exercise depend, God never made His work for man to mend.
-Dryden.

WE own that numbers join with care and skill,
A temperate judgment, a devoted will;
Men who suppress their feelings, but who feel
The painful symptoms they delight to heal; Patient in all their trials, they sustain

The starts of passion, the reproach of pain; With hearts affected, but with looks serene, Intent they wait through all the solemn scene, Glad if a hope should rise from nature's strife To aid their skill and save a lingering life.
-Crabbe.

WHEN nature cannot work, the effect of art is void,
For physic can but mend our crazy state,
Patch an old building, not a new create.
-Dryden.

$\mathrm{H}^{\mathrm{E}}$E intent on somewhat that may ease Unhealthy mortals, and with curious search Examines all the properties of herbs.

- Fohn Philips.

THE ingredients of health and long life are Great temperance, open air, Easy labor, little care.
-Sir Philip Sidney.

MICKLE is the powerful grace that lies
In plants, herbs, stones, and their true qualities.
-Shakespeare.


## 㫮scallomid.

(fscallonia rubra. Natural Order: Saxifragacea-Saxifrage Family.


-Butler.
$\Theta^{\mathrm{H} \text {, he sits on high in all the people's hearts; }}$ And that which would appear offense in us,
His countenance, like richest alchemy, Will change to virtue and to worthiness.

## 笑trxind gifomex．

Xermithemum amumu．Natural Order：Composita－Aster Fañily．
 NUSUAL favor marks the progress of this class of plants， which is steadily advancing in the estimation of flower fan－ ciers；for where a few years ago we had only the Gom－ phrena，we now have a dozen different kinds，all interesting， and most excellent for winter bouquets on account of their或皆imperishable flowers．They are noticeable，when the flower is expanded，for the lack of moisture in their petals，being crisp under the fingers，whence their botanical name，signifying，in Greek，a dry flower．They usually bloom solitary，or one on a stem．The colors of the various kinds are rose，white，purple，yellow，and red，each kind of plant having a variety of colors．Most any seedsman would gladly furnish their names，and the cultivator would experience a new sensa－ tion in seeing them bloom．For winter use they should be cut when most perfect，and dried in the shade．

## Flernitn．

＇$T$ IS the Divinity that stirs within us，
＇Tis Heav＇n itself that points out an hereafter， And intimates eternity to man． －Addison．

THE dream，which tells me life is short，
Foretells its endless day；
The mind，which wakes one thought of heaven，
May never know decay．
I love those dreams which link to heaven The soul with friendly ties；

Though sin makes dark the vale of tears， These brighten distant skies． Oh！when the spirit，freed from clay， Its wings impatient furls， How will it soar in haste away， To live in mystic worlds！
－W．R．Montgomery．
$T \mathrm{HE}$ eternal life beyond the sky，
Wealth cannot purchase，nor the high
And proud estate；
The soul in dalliance laid－the spirit
Corrupt with $\sin$－shall not inherit
A joy so great．－From the Spanish．

## 烈mpatoxinm，

Eupatorium elegals．Natural Order：Composita－Aster Family．


ERY few of these plants are under cultivation，and though the species is quite numerous，they are with few exceptions entirely unattractive．The Eupatorium elegans is admitted the greenhouse for its fragrant flowers，which are white； the Eupatorium aromaticum，also admired for its odor，has flowers of the same color，which bloom in the fall．The boneset and hoarhound belong to this same family，and，though useful，are homely herbs．They are said to have been named for Mithridates the Great（also called Eupator，that is，of a noble father，or well born），king of Pontus，who brought about a war with the Romans， and when conquered by Pompey，and conspired against by his own son，Pharnaces，rather than be taken prisoner by the Romans，com－ mitted suicide by taking poison，в．с． $6_{3}$ ．

## 具的哲等。

$0^{4}$H，my good lord，that comfort comes too late： ＇Tis like a pardon after execution．－Shakespeare．

THINK not tomorrow still shall be your care； Alas！tomorrow like today will fare． Reflect that yesterday＇s tomorrow＇s o＇er，－ Thus one＂tomorrow，＂one＂tomorrow＂more， Have seen long years before them fade away， And still appear no nearer than today．
－Gifford．

HOIST up sail while gale doth last， Tide and wind stay no man＇s pleasure； Seek not time when time is past， Sober speed is wisdom＇s leisure， After－wits are dearly bought， Let thy fore－wit guide thy thought．
－Robert Southwell．
Y OUR gift is princely，but it comes too late，
And falls，like sunbeams，on a blasted blossom．
－Suckling．

0MISSION to do what is necessary Seals a commission to a blank of danger； And danger，like an ague，subtly taints Even then when we sit idly in the sun．
－Shakespeare．

HE came too late！Neglect had tried Her constancy too long；
Her love had yielded to her pride， And the deep sense of wrong．
－Elizabeth Bogart．

## ITHPMaxtixat.

Efuphorbia splenuens. Natural Order: Euphorbiacca-Spurge Family.


HIS is a class of plants that are widely dispersed. Many of them are entirely wanting in beauty or any other quality to recommend them to notice, particularly those found in the temperate regions of North America. The few admitted within the precincts of the conservatory, greenhouse or dwelling are from the tropics, chiefly from South America. The above variety much resembles some of the Cacti; the stem is thick, fleshy and branching, and fortified with strong, sharp thorns. The leaves are few and oval; the flowers small, but of a brilliant scarlet. It is a native of Madagascar, and is only grown as a greenhouse or parlor plant, where it can have heat in winter. \#According to Pliny, it was named by Juba II., the king of Mauretania, in honor of his physician, Euphorbus.

## Reprauf.

SOME did all folly with just sharpness blame, While others laughed, and scorned them into shame;
But, of these two, the last succeeded best,
As men aim rightest when they shoot in jest. -Dryden.

DEAR heart, for whom I wait from year to year, Counting as beads each slowly-lagging day, What joy detains thee? In what distant sphere Art thou content to keep so long away? - Yoel Benton.

REPROVE not in his wrath incensed man, Good counsel comes clean out of season then; But when his fury is appeas'd and pass'd, He will conceive his fault and mend at lart.
-liandatph.

CORBEAR sharp speeches to her. She 's a lady
So tender of rebukes that words are strokes, And strokes death to her.
-Shakespeare.

Prithee forgive me;
I did but chide in jest; the best loves use it Sometimes: it sets an edge upon affection. - Midaleton.

How dare you let your voice Talk out of tune so with the voice of God In earth and sky? -Mrs. Osgood.

## 憾ntocit．

（Gutoca viscìa．Natural Order：Hydrophyllacea－Waterleaf Family

——ccern
ALIFORNIA is the native seat of this charming little annual， which has proved quite attractive and desirable for the various shades of the blue flowers，which retain their freshness well when severed from the plant for bouquets．There is some diversity in their habit，some being erect or almost so，and others are represented in botanical works as nearly procum－ bent．The flowers are tubular bell－shaped，about an inch long，blooming in racemes．There are a few novelties in this genus with different colored flowers，some of which are biennials．They bloom freely，but require a light soil．

## 凡 ${ }^{6} \mathrm{iff}$ ．

ND his gift，though poor and lowly it may seem to other eyes，
Yet may prove an angel holy，in a pilgrim＇s guise．－Whittier．

ACCEPT of this；and could I add beside
What wealth the rich Peruvian mountains hide； If all the gems in eastern rocks were mine， On thee alone their glittering pride should shine．
－Lyttleton．

I FORM＇D for thee a small bouquet， A keepsake near thy heart to lay， Because＇tis there，I know full well That charity and kindness dwell．
－Miss Gould．
CHE prizes not such trifles as these are：
The gifts she looks from me are pack＇d and lock＇d Up in my heart，which I have given already， But not delivered．
－Shakespeare．

IGAVE the jewel from my breast， She played with it a little while As I sailed down into the west， Fed by her smile；

Then weary of it－far from land，
With sigh as deep as destiny， She let it drop from her fair hand Into the sea．－－Fean Ingelozv．

WIN her with gifts，if she respects not words；
Dumb jewels often，in their silent kind，
More quick than words do move a woman＇s mind．
－Shakespeare．

## Jiguluxight.

(emphorbia hupericitulia. Natural Order: Euphorbiacea-Spurge Family.


YEBRIGHT is a simple little plant found in dry soils in the United States. It is an annual, about a foot and a half high, with smooth, purple stem, and leaves marked with oblong blotches. The blossoms are white, appearing in clusters during the summer. A medicine prepared from it was formerly used for diseases of the eye. 价here is also another plant called Eyebright, a native of the White Mountains, with bluish-white flowers appearing in spikes. Its classic name is Euphrasia, meaning cheerfulness, in Greek, from the same root as Euphrosyne, one of the three graces.

## 

$A^{\text {ND then her look - } \mathrm{O} \text {, where 's the heart so wise, }}$ Could, unbewilder'd, meet those matchless eyes?
Quick, restless, strange, but exquisite withal,
Like those of angels.

- Moore.

COME praise the eyes they love to see,
As rivaling the western star;
But eyes I know well worth to me
A thousand firmaments afar.

- Fohn Stirling.

THOSE laughing orbs that borrow
From azure $k$ ies the light they wear. Are like heaven - no sorrow

Can float o'er hues so fair.
-Mrs. Ospood.

NINE things to sight required are: The power to see, the light, the visible thing, Being not too small, too thin, too nigh, too far. Clear space and time, the form distinct to bring.
-Sir 7. Davies.

INEVER saw an eye so bright, And yet so soft as hers; It sometimes swam in liquid light,

And sometimes swam in tears;
It seem'd a beauty set apart
For softness and for sighs. $-1 / r s$ Welly.

HER eyes, in heaven.
Would through the airy region stream so bright
That birds would sing, and think it were not night
-Shakespeare.

## 

Anethum grameolens. Natural Order: Umbellifera-Parsley Family.

ENNEL, also called Dill, is found in country gardens along with coriander, anise and caraway, all of which produce seeds valuable for their pungent and aromatic flavor. The Fennel grows abundantly along the chalk cliffs of England in a wild and uncultivated state. Another species is cultivated to a Theo great extent in Italy. It is also found wild in the United States, and once introduced it propagates itself for years. \# The leaves are much divided, and spread out like a fine, thready plume. The flowers are small and yellow, blooming in umbels like the parsnip. Its botanical name is from the. Greek anethon, through the Latin anethum, both signifying Dill or anise; and graveolens (Latin), heavysmelling. Fennel is from foniculum, Latin diminutive of fonum, hay; the etymology of Dill seems lost; the Anglo-Saxon, German and Danish have the word substantially in the same form, but of what significance is not known.

#  

> TO sing thy praise, would heav'n my breath prolong, Infusing spirits worthy such a song, Not Thracian Orpheus should transcend my lays. -Dryden.

$\mathrm{H}_{\mathrm{T}}^{\mathrm{E}}$E gave you all the duties of a man;
Trim'd up your praises with a princely tongue, Spoke your deservings like a chronicle; Making you even better than his praise.
-Shakespeare.

COR praise too dearly loved, or warmly sought, Enfeebles all internal strength of thought; And the weak soul, within itself unblest, Leans for all pleasure on another's breast.

N praise so just let ev'ry voice be join'd,
And fill the general chorus of mankind! -Pope.

NATURE did her so much right
As she scorns the help of art; In as many virtues dight

As e'er yet embraced a heart.
So much good so truly tried,
Some for less were deified.
-William Browne.

## fifnncl fifomex.

Nigella Mamagrela. Natural Order: Ranunculacea-Crowfoot Family.


——crex NATIVE of the south of Europe and the Levant, deriving its distinctive epithet from the world-renowned and ancient Damascus, this curious annual is grown as an ornamental flower in gardens and borders of walks. It is called Nigella from its black seeds, and has a variety of popular names -Love-in-a-mist, Devil-in-a-bush, and Ragged Lady. The blossoms of the different kinds are purple, blue, and white. They bloom single or solitary, and are encircled with fine, feather-cleft leaves, like the foliage on other parts of the plant, which much resembles the aromatic garden fennel.

## Artifity.

WHAT's the bent brow, or neck in thought reclin'd?
The body's wisdom to conceal the mind.
A man of sense can artifice disdain,
As men of wealth may venture to go plain. -roung.

YOU talk to me in parables;
You may have known that I'm no wordy man; Fine speeches are the instruments of knaves,

0THERS by guilty artifice and arts Of promised kindness practice on our hearts; With expectation blow the passion up;
-Granville.

0SERPENT heart, hid with a flowering face! Did ever dragon keep so fair a cave? -Shakespeare.

PATIENCE! I yet may pierce the rind Wherewith are shrewdly girded round The subtle secrets of his mind.

A dark, unwholesome core is bound, Perchance, within it. Sir, you see, Men are not what they seem to be.
-Paul H. Havne.
T EN quit her, my friend! Your bosom defend,
Ere quite with her snares you're beset.
-Byron.

## 

Autigramua rlijophylla. Natural Order: Filices-Fern Family.


HAT is more beautiful than the gracefully sweeping Fern, that clothes the ragged, rocky clifts, hanging like so many \% plumes from every crevice, to catch the moisture of the $m_{0}$ timid spring that slips out to trickle over the green moss and hide in its bosom? Oh, marvelous is nature in her simplest simplicity! The Walking Fern is one of the rare ones, to be found in rocky woods. The frond or leaf is about six or seven inches in length, and its peculiarity consists in bending the long, slender tip backward until it reaches the ground, when it takes root, from which a plant arises the following year. \# The botanical names were probably given it because of its peculiarities, and denote, in Greek, root-leaved counterpart or transcript.

## 6urimsity.

THE skies in the darkness stoop nearer and nearer, A cluster of stars hangs like fruit in the tree, The fall of the water comes sweeter comes clearer;

To what art thou list'ning, and what dost thon see?
Let the star-clusters glow, Let the sweet waters flow, And cross quickly to me.

- 7ean Ingelow.

CEARCHING those edges of the universe, We leave the central fields a fallow part;
To feed the eye more precious things amerce, And starve the darkened heart.

- Fean Ingelow.

THRO' the buzzing crowd he threads his way, To catch the flying rumors of the day.

- Sprague.

CURIOSITY! who hath not felt
U Its spirit, and before its altar knelt?

- Sprague.

CONCEAL yersel' as weel's ye can
Fra' critical dissection;
But keek thro' every other man
With lengthen'd, sly inspection.
-Burus.

RUT love is such a mystery,
I cannot find it out:
For when I think I'm best resolved, Then I am most in doubt.



## Sixax

Linum usitatigsiumu. Natural Order: Linacea-Flax Family.


OMPARED with plants not grown directly for food, the Flax is probably the most useful as well as the most ancient known to man. In various parts of the world it is grown in large quantities, forming the industry of a large population, furnishing employment both summer and winter in raising, gathering and caring for the crop, considerable attention being required in preparing the fiber for the manufacturing arts. The fields have a fine appearance when the Flax is in bloom, presenting an uninterrupted blue surface to the eye that is truly pleasing.t There are some handsome varieties of tropical Flax for both garden and greenhouse, with flowers of scarlet, yellow, white, and rose color, some of them being perennial.

## 見amestir

$W^{\text {HAT happriess the rural mid atends, }}$ In cheerful labor while each day she spends She gratefully receives what heaven has sent, And, rich in poverty, enjoys content. -Gay.

NEAT little housewife, so demure, Plying the needle swift and sure, In quiet places, What charm is in those darksome eyes, What magic in your beauty lies, And lovely graces!

SWEETER and sweeter, Soft and low, Neat little nymph, Thy numbers flow,
Urging thy thimble, Thrift's tidy symbol, Busy and nimble, To and fro;

No sound to break your gentle dream;
Those lily hands from seam to seam
Are ever stirring;
All hushed - as summer's noonday hour,
When sleep the bee, and leaf, and flowerSave pussy's purring.

Prettily plying Thread and song, Keeping them flying Late and long,
Though the stitch linger, Kissing thy finger, Quick -as it skips along. 7. W. Palmer.






## (hentian

## Gentiana acaulis. Natural Order: Gentianacee-Gentian Family.



ENTIAN is a plant of excellent tonic and febrifuge properties, which are said to have been first discovered by Gentius, king of ancient Illyria, in whose honor it was named. It is found abundantly in the Western States, where the land lies low and is more or less moist, which soil seems most congenial to its growth. It is not unusual to find acres of land dotted freely with its blue blossoms, particularly in openings in the woods. Besides our native plants, we have other specimens from Wales, Australia, and the Alps. The two from the first-named countries have blue flowers, the latter yellow ones. The more dwarf varieties are the best adapted for rock culture.

## 

> CIRM and resolved by sterling worth to gain Love and respect, thou shalt not strive in vain. -Sir S. E. Brydges.

0HOW thy worth with manners may I sing, When thou art all the better part of me? What can mine own praise to mine own self bring?

And what is 't but mine own, when I praise thee?
-Shakespeare.
$A_{\text {All that is pure in piety its bequest }}^{\text {LL }}$ All that is pure in piety its bequest, The subtle spring of truth, the soul of power. It gives our dreams their scope, our life its zest. -Isidore G. Ascher.

KNOW transplanted human worth Will hloom to profit otherwhere.

> -Tennyson.

THERE is a joy in worth,
A high, mysterious, soul-pervading charm, Which, never daunted, ever bright and warm, Mocks at the idle, shadowy ills of earth, Amid the gloom is bright, and tranquil in the storm
" $T$ IS what the heart adores, where'er the eye Doth rest, on ocean, earth, or in the sky;
For love ne'er worships willingly a blot, But looks for what is pure, for what is fair, For what is good, as heaven and angels are.
-Sallie A. Brock.
$\mathrm{B}^{\text {EAUTIES that from worth arise, }}$
Are like the grace of deities,
Still present with us, though unsighted.
-sir 7. Sucking.

## (19exanixm

Greranium sanguinemi. Natural Order: Geraniacea-Geranium Family.


ANY are the varieties of this beautiful plant, most of which are nurtured in the window or greenhouse, either for their beauty of blossom or the delightful fragrance of their leaves. Some of them are from the Cape of Good Hope, but this beautiful species, with its blood-red flowers, is a native of Europe. It is well adapted to make a brilliant show in the garden in summer, being again removed to the house in the fall. The name is derived from geranos, a Greek word meaning crane, the seeds having a long spur (supposed to resemble a crane's bill), which in planting should be cut off with the scissors, as it tends to push the seeds out of the ground before sprouting.

## Cantionent.

TRUST in thee? Aye, dearest, there 's no one but must, Unless truth be a fable in such as thee trust;
For who can see heaven's own hue in those eyes,
And doubt that truth with it came down from the skies?
While each thought of thy bosom, like morning's young light, Almost ere 'tis born, flashes there on his sight.
-C. F. Hoffman.
$\bigcup^{\text {UT }}$ of the depths of the starlit distance [up, A pale gleam shows where the moon comes And here in the dregs of this strange existence May lurk the sweetness that crowns the cup,

And faith and hope and the spirit's patience Strengthen the heart and lighten the eyes. Ah, soul! my soul! there is hope for the nations, And God is holy and just and wise. -Barton Grey.

I TRUST in thee, and know in whom I trust; Or life or death is equal; neither weighs: All weight is this: $O$ let me live to thee! -roung.

HAVE I not brought thee roses fresh with youth, And snow-white lilies, pale with pure desire? Beheld in thee my inmost dream of Truth, And felt no beauty thou didst not inspire? - Fool Benton.
$\bigcup^{\mathrm{H}!\text { emblem of that steadfast mind }}$
Which, through the varying scenes of life,
By genuine piety refined,
Holds on its way 'midst noise and strife!


## (GIatue figntex.



## (160xxt.

Aagemaria pulgaris. Natural Order: Cucurbitacea-Gourd Family.


NOWN scientifically as Lagenaria, from the Latin lagena, a bottle, the common Bottle Gourd, or Calabash, is familiar to all. It grows like a round ball, gradually extended into a handle. ${ }^{3}{ }^{3}$ When ripened, a slice is cut from one side, and the seeds are removed, thus forming a very convenient vessel for dipping water, for which purpose it was used in early times. There are upward of fifty different kinds of this interesting plant, all of 4. them being natives of tropical countries. Some are large and grotesque, others small, fanciful, delicate, beautiful in shape and color, and worthy of enthusiastic admiration. ${ }^{\text {r }}$ Hawthorne said they were "worthy of being wrought in enduring marble."

## 

$H^{E}$ who, from zone to zone,
Guides through the boundless sky thy certain flight,
In the long way that I must tread alone
Will lead my steps aright. -William Cullen Bryant.

AN yet I know past all doubting, truly-
A knowledge greatcr than grief can dim-
I know, as he loved, he will love duly, Yea, better - e'en better than I love him;

M Y wingéd boat, A bird afloat,
Swims round the purple peaks remote:-
Round purple peaks
It sails, and seeks
Blue inlets and their crystal creeks,
Where high rocks throw,
Through deeps below,
FROM the low earth round you,
Reach the heights above you; From the stripes that wound you,

Seek the loves that love you.

And as I walk by the vast, calm river
The awful river so dread to see,
I say, "Thy breadth and thy depth forever
Are bridged by his thoughts that cross to me."
-Fean Ingelow.
A duplicated golden glow.
Far, vague, and dim,
The mountains swim;
While on Vesuvius' misty brim,
With outstretched hands
The gray smoke stands, O'erlooking the volcanic lands.
-Thomas Buchanan Read.
God's divinest burneth plain
Through the crystal diaphane
Of our loves that love you.
-Elizabeth Barrett Browning.

## (13x)

Authozanthum odoratum. Natural Order: Graminea-Grass Family.

 sive order Gramineæ, which contributes more to the sustenance of man and beast than all others combined. $\#$ It has an element of poetry in its botanical name, which signifies sweetly-scented yellow flower; and has for ages been considered an emblem of utility.

## 

HERE may I always on this downy grass, Unknown, unseen, my easy minutes pass!
-Roscommon.

THUS is nature's vesture wrought,
To instruct our wandering thought;
Thus she dresses green and gay,
To dispense our cares away. -Dyer.

OT enjoyment and not sorrow
Is our destin'd end or way
But to act that each tomorrow
Finds us farther than today. -Longfellow.

THE chiefest action for a man of spirit, Is never to be out of action; we should think
The soul was never put into the body, Which has so many rare and curious pieces Of mathematical motion, to stand still. Virtue is ever sowing her seeds. -Webster.


HE even grass beneath our feet
Was something greener and more sweet Than that which grew below.

We breathed a purer, better air;
Our lives seemed wider and more fair,
And earth with love aglow.
-Henry Abbey.

## (fyxany ix ny,

IVepeta $\mathfrak{G}$ lechoma. Natural Order: Labiate—Mint Family.



ROUND IVY, or Gill-over-the-ground, is a very pretty plant of rapid growth, to be found about hedges, old walls, and among the rocks along the margins of creeks and small streams. The stem, which is naturally prostrate, if suffered to lie on the ground, takes root at every joint, sending out in turn new creepers, which grow from a few inches to two feet in length. In a hanging basket it trails from the sides, completely enveloping it, delighting in shade and plenty of moisture. $\#$ The flowers are of a bluish purple, blooming in May. The leaves are aromatic, and were formerly used in brewing ale. It is sometimes called Alehoof, and Tunhoof. It derives its scientific name from Nepete, now Nepi, in Italy; and Glechoma was the name given it by Linnæus.

## 

## OY is no earthly flower, nor framed to bear In its exotic bloom life's cold, ungenial air.

-Mrs. Hemans.

We are all children in our. strife to seize
Each pretty pleasure, as it lures the sight; And like the tall tree, swaying in the breeze, Our lofty wishes stoop their tow'ring flight,

Till, when the prize is won, it seems no more Than gather'd shell from ocean's countless store, And ever those who would enjoyment gain, Must find it in the purpose they pursue. -Mrs. Hale.

$$
\begin{aligned}
& \text { WITH much we surfeit, plenty makes us poor, } \\
& \text { The wretched Indian scorns the golden ore. }
\end{aligned}
$$

## -Drayton.

$A$ ! here how sweet, my love, my own, To dream, aloof from any sorrows, Of one fair, changeless monotone -

Serene tomorrows and tomorrows!

Ah! sweet, in sooth, when God had furled
All colors at the calm sky-verges,
And night came silencing the world,
And loudening the long sea-surges!
-Edgar Fazvcett.

WISE heaven doth see it as fit
In all our joys to give us some alloys,
As in our sorrows, comforts. -Fountain.





## 

fjelenium autumale. Natural Order: Composita-Aster Family.


HIS plant is named for the celebrated Helen, a daughter of Jupiter, who was so renowned for her beauty that she was seized by Paris, son of Priam, and carried to Troy, thereby causing the Trojan war. She is said to have "availed herself of its cosmetic properties." In medicine it is a tonic, produces an insensible perspiration; and it is also made into 3 a snuff for medical use, which gives it the common name of Sneeze${ }^{3}$ wort. \# It grows in low ground or moist places in fields and by-ways, wholly uncultivated, having an herbaceous growth of from two to three feet in height. The plant blooms in August; the flowers are yellow.

## 

WHAT gem hath dropp'd, and sparkles o'er his chain?
The tear most sacred shed for others' pain,
That starts at once-bright, pure-from pity's mine,
Already polish'd by the hand divine.
$R^{\text {AISE it to heaven, when thine eye fills with tears, }}$ For only in a watery sky appears
The bow of light; and from the invisible skies Hopes glory shines not, save through weeping eyes.
-Mrs. F. A. Butler.
$\mathrm{B}^{\text {LEST tears of soul-felt penitence! }}$
In whose benign, redeeming flow
Is felt the first, the only sense
Of guiltless joy that guilt may know ! -Moore.

BUT these are tears of joy! to see you thus, has fill'd My eyes with more delight than they can hold.
-Congreve.

THANK God, bless God, all ye who suffer not More grief than ye can weep for. That is wellThat is light grieving! lighter, none befell, Since Adam forfeited the primal lot.
Tears! what are tears? The babe weeps in its cot,

The mother singing,- at her marriage-bell The bride weeps,--and before the oracle Of high-faned hills, the poet has forgot Such moisture on his cheeks.
-Elizabeth Barrett Browning.

T
HOU weep'st: O stop that shower of falling sorrows,
Which melts me to the softness of a woman,
And shakes my best resolves. -Trap.

## 

fieliotropium 引jermiamm. Natural Order: Boraginacea-Borage Family.

—.anceronos
ELIOTROPE is a small and elegant shrub about two feet high, a native of Peru. The flowers bloom in clusters, and are of a delicate lavender or purple tint, with the fragrance of vanilla, and are especially desirable for bouquets. It is that Clytie, who had been loved and deserted by Apollo, seeing his attachment for her sister Leucothea, pined away, with her eyes gazing continually upon the sun, and was at last turned into a flower called Sunflower, or Heliotrope. The name is derived from the Greek Helios, sun, and trepo, to turn. It is also called Turnsole, from its turning to Sol, the Latin for sun. It was introduced into France by Jessieu, about 1740. There are several other flowers that follow the course of the sun, the best known being probably the common yellow Sunflower.

## Datutian.

DEVOTION'S self shall steal a thought from heaven; One human tear shall drop, and be forgiven.
-Pope.


GIVE thee prayers, like jewels strung
On golden threads of hope and fear; And tenderer thoughts than ever hung

In a sad angel's pitying tear.

As earth pours freely to the sea
Her thousand streams of wealth untold,
So flows my silent life to thee, Glad that its very sands are gold.
-Rove Terry.
IN vain doth man the name of just expect, If his devotions he to God neglect.
-Sir 7. Denham.
LOVE her for that loving trust
That makes the one she loves all just, And faith that's blind in loving;

A love that smiles away all tears, And looks not way beyond these years, To see what love is proving. -C. C. C.

NE grain of incense with devotion offered
'S beyond all perfumes or Sabæan spices By one that proudly thinks he merits it.

- Massinger.



## 起 $\mathfrak{m p r}$ ．

Camabis satida．Natural Order：．Urticacea－Nettle Family．

ANNABIS（Greek and Latin for Hemp）is a common and well－known plant，naturalized in waste places in the United States．It came originally from Persia and the East Indies， where the natives make an intoxicating beverage from it．In some States it is largely cultivated for the fiber of the stalks， and when properly prepared is manufactured into the coarser grades of toweling and ropes．It grows quite tall and erect，branching at intervals，having foliage that is sharply cleft and palmate，giving the whole plant a light，airy appearance．The flowers are green，and the seeds are crowded up and down the summits of the branches．It is very appropriate for sowing along fences，and is admirable for forming screens to shut off unsightly objects in a rear yard．In the fall，the seeds attract the dear little birds，which sometimes visit them in large flocks，after the frost and late season have exhausted other sustenance．
煟焐我

HEAV＇N from all creatures hides the book of fate， All but the page prescribed their present state．

$$
- \text { Pope. }
$$

HE Fates but only spin the coarser clue；
The finest of the wool is left for you． －Dryden．
$W^{\text {Hat fue impees nee max nead abiee }}$ It boots not to resist both wind and tide． －Shakespeare．
$T$ HY downcast looks，and thy disorder＇d thoughts Tell me my fate：I ask not the success My cause has found．

CUPREME，all－wise，eternal Potentate！
Sole Author，sole Disposer of our fate， Enthroned in light and immortality，
Whom no man fully sees，and none can see！
－Addison．
Original of beings！Power divine！ Since that I live，and that I think，is thine！ Benign Creator！let thy plastic hand Dispose its own effect．
－Matthezv Prior．
－ATE，show thy force；ourselves we do not owe； What is decreed must be；and be this so．





## 縣和。

Gumulus lupulus．Natural Order：Urticacea－Nettle Family． liquids．The stem is an annual，decaying every fall，and springing again from the ground in the spring．It grows to a great length，and twines around its supports with the sun，from east to west．It is cul－ tivated in large fields in various parts of the country，and in the fall calls together large concourses of laborers who are paid a certain sum per pole to gather the hops，which is done usually amid great hilarity．

## Thiniustita．

$\mathrm{H}^{\mathrm{E} \text { 'S poor, and that's suspicious - he 's unknown, }}$
And that's defenceless; true, we have no proof
Of guilt - but what hath he of innocence?

AFINE and slender net the spider weaves， Which little and slight animals receives；
And if she catch a summer bee or fly， They with a piteous groan and murmur die；

But if a wasp or hornet she entrap， They tear her cords，like Samson，and escape； So，like a fly，the poor offender dies； But like the wasp the rich escapes，and flies． －Denham．

IN the corrupted currents of this world，
Offense＇s gilded hand may shove by justice；
And oft＇tis seen，the wicked prize itself
Buys out the law．
－Shakespeare．

JUSTICE is lame，as well as blind，amongst us； The laws，corrupted to their ends that make them， Serve but for instruments of some new tyranny， That every day starts up t＇enslave us deeper． －Otway．

UNHEARD，the injured orphans now complain； The widow＇s cries address the throne in vain， Causes unjudged disgrace the loaded file， And sleeping laws the king＇s neglect revile．

## foxse chestmut.

Alesculus fijpporastamum. Natural Order: Sapindacea-Soapberry Family.


UCH admired for its beautiful foliage, the Horse Chestnut mainly cultivated for the shade it affords. Its name in sosour vernacular is an exact translation from the Greek of the latter half of the scientific name; and Æsculus, from the Latin $c s c a$, food, was originally applied to a speF cies of oak, and probably to other like trees with edible acorns or nuts. The flowers are white, marked with pink and yellow. It is of very rapid growth, and reaches the height of thirty or forty feet in a few years. The tree is a native of the northern part of the Asiatic continent. There is a similar tree, called the Æsculus glabra (smooth), found in Ohio and other western States, generally known by the name of Buckeye. The nuts are an irregular, rounded shape, and a rich brown in tint. They are more or less injurious to all animals except deer.

## 

$T$ HESE thoughts he strove to bury in expense,
Rich meats, rich wines, and vain magnificence.
-Harte.

0
LUXURY! thou curs'd by heaven's decree,
How ill-exchang'd are things like these for thee! How do thy potions, with insidious joy, Diffuse thy pleasures only to destroy!

T $T$ is a shame that man, that has the seeds Of virtue in him, springing unto glory, Should make his soul degenerous with sin, And slave to luxury.
-Marmyon.

CELL luxury! more perilous to youth Than storms or quicksands, poverty or chains.

- Hannah More.

W AR destroys men, but luxury mankind At once corrupts; the body and the mind. -Crozun.
$\mathrm{B}^{\text {UT }}$ just disease to luxury succeeds, -Pope.
' $T$ IS use alone that sanctifies expense,
And splendor borrows all her rays from sense.

## 智がmsdeck。

Sempervinum tectormm．Natural Order：Crassulacea－Orpine Family．


ARIOUS peculiar shapes are assumed by this and other ${ }_{3}{ }_{3}$ plants of the same class．Some grow erect like the com－ mon Orpine or Live－forever，while the Houseleek assumes 10 the shape of a rosette，each thick，pointed leaf arranged in the most symmetrical order，all being so hardy that they survive the most adverse treatment；growing in poor soil，or even on walls or housetops．Its name literally denotes，in Latin，the always alive of roofs．The Echeveria，a native of California and Mexico，is the handsomest of the family，as the leaves are covered with a fine bloom，such as one sees on the cheek of a plum or a cluster of freshly－plucked grapes．The blossoms of some are scarlet，others are yellow．Many of them are most excellent for the dry air of the sitting－room，and do not require as much attention as most other house or conservatory plants．

## Viuntitn．

HER merry fit she freshls＇＇gan to rear， And did of joy and jollity devise， Herselt to cherish and her guest to cheer．
－Spenser．

THE long carousal shakes th＇illumined hall， Well speeds alike the banquet and the ball； And the gay dance of bounding beauty＇s train Links grace and harmony in happiest chain．
－Byrou．

THE seasons all had charms for her， She welcomed each with joy：
The charm that in her spirit liv＇d No changes could destroy． －Mr．s．Hale．
$T \begin{gathered}\text { EACH me half the gladness } \\ \text { That thy brain must know }\end{gathered}$
Such harmonious madness
From my lips would flow， The world should listen then，as I am listening now．
－Percy By．s．he Shelly．

## 路口サax．

ffona lanhoga．Natural Order：Asclepiadacea－Milkweed Family．


REENHOUSES，conservatories and parlors in our latitudes gladly give shelter to these beautiful vines，which are indig－ enous to the warmer regions of India．It has been called Hoya in honor of T．Hoy，an English florist，and carnosa from the Latin caro，flesh，because of its thick，fleshy leaves． The branches are twining，and need a support to keep them in an upright position．The leaves are of an oval shape，terminating in a sharp point，and are beautiful and attractive in themselves，having the appearance of green wax；and the flowers，which bloom in dense umbels，are supremely beautiful，being waxy in texture，and in color a most delicate rose－flushed white．The old flower－stems should not be removed，as they bloom year－after year．There is a variety that has a pale－yellow or whitish margin to the leaf．It does not require a rich soil．It has the habit，when well growing，of starting out its vine sometimes a yard or more before the leaves make their appearance，and care should be taken not to break these naked stems，as they are rather tardy in growing again．

## Srufutare．

$S^{O}$ stands the statue that enchants the world，
So bending tries to veil the matchless boast， The mingled beauties of exulting Greece．
－Thompson．
$T \mathrm{O}$ famed Apelles，when young Amnon brought
The darling idol of his captive heart，
And the pleased nymph with kind attention sat，
To have her charms recorded by his art．
－Waller．
$A^{\mathrm{N}}$ hard and unrelenting she As the new－crusted Niobe， Or，what doth more of statue carry， A num of the Platonic quarry．
－Cleveland．

FANCIES and notions he pursues， Which ne＇er had being but in thought： Each，like the Grecian artist，wooes The image he himself has wrought．
－Prior．

V $Y$ share in pale Pyrene I resign，
And claim no part in all the mighty nine； Statues with winding ivy crown＇d belong To nobler poets，for a nobler song．


## 

hydrangea fjortensia. Natural Order: Saxifragacea-Saxifrage Family.


ROM the circumstance that much water is demanded for its sustenance, this plant has been called Hydrangea, from the Greek udor, water, and aggos, a pail. It was called Hortensia by the French botanist, Commerson, in honor of his friend, - Madame Hortense Lapeaute. This species is supposed to be 9, a native of China. Its stem is from one to three feet high, Qhaving large, oval leaves. The flowers, which continue in bloom for several months, are at first green, passing through the various hues of straw-color, sulphur, yellow, white, purple, and pink. They are said to bloom best in a rather shady location, as they become blasted or scorched by the extreme heat of the sun.

## 

AKE up no more than you by worth can claim;
Lest soon you prove a bankrupt in your fame.
-Young.
O spake the apostate angel, though in pain
Vaunting aloud, but rack'd with deep despair.

- Milton.
WE rise in glory, as we sink in pride;
Where boasting ends, there dignity begins.
- Young.
CONCEIT, more rich in matter than in words,
Brags of his substance, not of ornament:
They are but beggars that can count their worth.
-Shakespeare.
$T$ HIS self-conceit is a most dangerous shelf, Where many have made shipwreck unawares;
He who doth trust too much unto himself,
Can never fail to fall in many snares.
-Earl of Sterling.

RAWN by conceit from reason's plan,
How vain is that poor creature, man!
How pleas'd in ev'ry paltry elf
To prate about that thing, himself.
-Churchill.

WHAT art thou? Have not I
An arm as big as thine? a heart as big?
Thy words, I grant, are bigger; for I wear not My dagger in my mouth.
-Shakespeare.

## 

fugsupus afficitalig. Natural Order: Labiata-Mint Family.


等
URING the Jewish dispensation the Israelites used this plant in their purifications (Exodus xii, 2i). It is found in abundance on the hills of Palestine near Jerusalem. It is about two feet high, with a bushy stalk, an aromatic smell, and a pungent taste. The common species is a native of Europe. It is a handsome plant, having bright blue flowers and delicate leaves. It is usually cultivated for its medicinal properties. The name of this plant is derived from the Hebrew ezob, through the Greek ussopos.

## Purifitation.

LEST are the pure! Would'st thou be blest?
He'll cleanse thy spotted soul. Would'st thou
He'll cleanse thy spotted soul. Would'st thou find rest?
Around thy toils and cares He'll breathe a calm, And to thy wounded spirit lay a balm:
From fear draw love, and teach thee where to seek Lost strength and grandeur with the bowed and meek.
-Dana.

AST my heart's gold into the furnace flame,
And if it comes not thence refined and pure, I'll be a bankrupt to thy hope, and heaven Shall shut its gates on me.
-Mrs. Sigourney.

CHE grew a sweet and sinless child,
In sun and shadow, calm and strife -
A. rainbow on the dark of life,

From love's own radiant heaven down smiled. -Massey.

CROM purity of thought all pleasure springs, And from an humble spirit all our peace.
-Young.

IKE hright metal on a sullen ground,
L My reformation, glittering o'er my fault,
Shall show more goodly, and attract more eyes,
Than that which hath no foil to set it off.
-Shakespeare.

W ASH me with thy tears! draw nigh me, That their salt may purify me!
Thou remit my sins, who knowest All the sinning, to the lowest.
-From the Greek (trans. by E. B. Browing).

YET time serves, wherein you may redeem
Your banished honors, and restore yourselves
Into the good thoughts of the world again. -- Shakespeare.


## gndian gitallom,

Abutilon Adicema. Natural Order: Malvacere-Mallow Family.

 across, the color of which is yellow. Another species of Abutilon, adapted only to house or conservatory growth, is a shrub from Brazil, growing several feet in height, with broad, palmate leaves, and handsome, bellshaped flowers of yellow, curiously veined with a dark red. Planted in the ground in the greenhouse, the trunk becomes several inches in thickness, but can accommodate itself to limited quarters in pot culture. To bloom well it must have the sun. The origin of the name Abutilon is unknown; Avicenna was a celebrated Arabian physician and philosopher of the middle ages.

## 居timationt

CHE attracts me daily with her gentle virtues, So soft, and beautiful, and heavenly.

- Games A. Hithouse.

T RIENDSHIP is no plant of hasty growth,
Tho' planted in esteem's deep-fixed soil, The gradual culture of kind intercourse Must bring it to perfection. -Yoana Baillie.

HOW much to be priz'd and esteem'd is a friend, On whom we can always with safety depend! Our joys, when extended, will always increase, And griefs, when divided, are hush'd into peace. -Mrs. Margaret Smith.

THOU gav'st me that the poor do give the poor,
Kind words and holy wishes, and true tears;
The loved, the near of kin, could do no more,
Who changed not with the gloom of varying years,
But clung the closer when I stood forlorn,
And blunted slander's dart with their indignant scorn.

- Mrs. Nertan.



## 

Cilia cormonitolia. Natural Order: Polemoniacea-Polemonium Family.


ECAUSE of its finely pinnatifid foliage, nearly resembling the cypress vine, this plant used to be, and perhaps is still, in some localities, called Standing Cypress; but it belongs to another class of plants. It is a handsome plant, though not blooming until the second year. Seeds should be sown every spring for the next year's blooming, as should be done with all biennials, in order to have them every summer. The first year, the Ipomopsis rests like a tuft of finely-cut leaves close to the ground, and should be removed and kept in sand free from moisture and hard frost, or, if left in the ground, the soil must be well drained, as they are liable to decay with much dampness. The second year, the stalk rises and branches, covering itself with thread-like foliage, while its tubular flowers of scarlet, yellow, or rose, surround its stems for a foot or more.

## SHtyblit.

HE has jumped the brook, he has climbed the knowe,
There's never a faster foot, I know,
But still he seems to tarry. -Sidney Dowel.
$B_{\text {Exquisite interval, I'm on the rack: }}^{\text {E not long, for in the tedious minutes, }}$ For sure the greatest evil man can know, Bears no proportion to this dread suspense.

0H! how impatience gains upon my soul When the long-promis'd hour of joy draws near; How slow the tardy moments seem to roll, What specters rise of inconsistent fear.

0THAT man might know The end of this day's business, ere it come!
But it sufficeth that the day will end, And then the end is known.
-Shakespeare.
$S^{O}$ tedious is this day,
As is the night before some festival
To an impatient child that hath new robes,
And may not wear them.
-Shakespeare.
$A$ ND there are hearts that watch and wait
For those who toil upon the shore:
Their welcome footstep at the gate
Is heard-ah! nevermore! -George Cooper.



## Iasmine-- Tidhite.

Iasminmu officuale. Natural Order: Yasminacer-Yasmine Family.


HITE JASMINE is a splendid shrub, climbing on supports to a height of fifteen or twenty feet, and is much used in Europe for the covering of arbors and trellises. It is not sufficiently hardy to endure the winters of our Northern States without the protection of a wall or other building to defend it from the fierce breath of the ungenial north wind. Its flowers are beautiful and fragrant, and their praises have been beautifully sung by Lord Morpeth (afterward earl of Carlisle), who says:

> "I ask not, while I near thee dwell,
> Arabia's spice or Syria's rose;
> Thy bright festoons more freshly smell,
> Thy virgin white more freshly glows."

There is in the tropical parts of the United States a fine Jasmine with beautiful yellow blossoms, that is heavily laden with delightful perfume. It is now cultivated in all warm climes, but was unknown in Europe until 1560 , when it was introduced by the Spaniards from the East.

## Amiatifity.

$\varlimsup^{\mathrm{HE}}$ twining jessamine and blushing rose
With lavish grace their morning scents disclose.

AN oft when from that scorching shore,
In after years those odors came,
He pictured his green cottage door,
The shady porch and window frame,

HOW lovelily the jasmine Hower
Blooms far from man's observing eyes; And having lived its little hour,

There withers,- there sequester'd dies!
-Prior.
Far, far away across the foam:
The very jasmine-flower that crept
Round the thatched roof about his home Where she he loved then safely slept. - Miller.

Though faded, yet 'tis not forgot;
A rich perfume, time cannot sever,
Lingers in that unfriended spot,
And decks the jasmine's grave forever.



## ficmucayix．

himuèna momphnlla．Natural Order：Leguminosa－Pulse Family．
$\frac{2}{2}+x^{2}$學 conservatory or greenhouse，occupying a prominent position睢 among the beautiful climbers，some of the species，however，緊being as yet quite rare．The commonest variety has either blue筑a，crimson flowers．There are others with scarlet，purple，and one with nearly black，flowers．They grow readily from seed， which should be soaked in warm water previous to planting，and can be grown in pots，or placed in the ground when the weather is warm and settled．The pots should be well drained．

## 

AL higher knowledge in her presence falls
Degraded，wisdom in discourse with her
Loses discount＇nanced，and like folly shows．
－Milton．

MARK her majestic fabric！she＇s a temple Sacred by birth，and built by hands divine； Her soul＇s the deity that lodges there； Nor is the pile unworthy of the god．－Dryden．

WHAT＇S the brow， Or the eye＇s luster，or the step of air， Or color，but the beautiful links that chain The mind from its rare elements．－Willis．

> THINK of her worth, and think that God did mean This worthy mind should worthy things embrace: Blot not her beauties with thy thoughts unclean, Nor her dishonor with thy passion base. - Sir 7 . Davies.

MIND，mind alone，（bear witness earth and heaven！） The living fountains in itself contains Of beauteous and sublime；here，hand in hand，

Sit paramount the graces；here enthron＇d， Celestial Venus，with divinest airs， Invites the soul to never－fading joy．

A MIND of broad and vigorous scope，
A penetration quick and keen，
An insight into things unseen，
A liberal dower of faith and hope．
－Kate 7．Hill．
178

## gituyts Sliprex.

Oupripritum pubegcens. Natural Order: Orchidacea-Orchis Family.


OST of these plants delight in damp, marshy ground, reveling beside brooks, bending over springs, hiding in the of woods, and sporting on the boundless prairie; dancing to the music of the wind or the rippling water with as much grace and ease as Terpsichore herself. Some of the blossoms of the species found in the western woods are very large, especially the above variety, which will hold at least two tablespoonfuls of fluid, and is of a bright yellow in color, with dark spots within the aperture. The shape is similar to the blossoms of the Calceolarias of the greenhouse-that is, like a pouch or bag.

## Tifkfents.

$T$ HEY know how fickle common lovers are,
Their oaths and vows are cautiously believed, For few there are but have been once deceived.

> -Dryden.

IKE conquering tyrants you our breasts invade,
Where you are pleased to ravage for a while: But soon you find new conquests out, and leave The ravag'd province ruinate and bare.
[ NCONSTANT as the passing wind, As winter's dreary frost unkind; To fix her, 'twere a task as vain To count the April drops of rain.

REPROVE me not that still I change
With every changing hour,
For glorious nature gives me leave
In wave, and cloud, and flower.

Yon soft, light cloud, at morning hour,
Looked dark and full of tears:
At noon it seemed a rosy flower-
Now gorgeous gold appears.

So yield I to the deepening light
That dawns around my way;
Because you linger with the night. Shall I my noon delay.
-Frances S. Osgrood.
$\mathbf{W}^{E}$ vary from ourselves each day in mind,
Nor know we in ourselves, ourselves to find. -Heath.






## giducndex.

(Cabaùula spia. Natural Order: Labiata-Mint Family.


EUROPE produces immense fields of Lavender, grown for the sake of the flowers, from which is obtained the perfume that is sold by all druggists and perfumers. It has a very pleasant, agreeable odor. The Latin word from which it is derived is lavare, to bathe, and brings to mind the marble baths of the early Greeks and Romans, when the most exquisite of sculpture, the most beautiful productions of art and nature, were gathered together for their adornment, and flowers and spices were rifled of their sweets to add to the sumptuousness and luxuriousness of their ablutions. It is a perennial of easy culture, about eighteen inches high, delightfully aromatic, and bears purple flowers. The oil possesses tonic and stimulative properties, and is used in medicine.

## Confersian

$A^{\text {ND lavender, whose spikes of azure bloom }}$
Shall be erewhile in arid bundles bound, To lurk amidst her labors of the loom, And crown her kerchiefs clean with mickle rare perfume.
-Shenstone.

CWEET lavender! I love thy flower Of meek and modest blue, Which meets the morn and evening hour, Tbe storm, the sunshine, and the shower, And changeth not its hue.

Thou art not like the fickle train Our adverse fates estrange; Who in the day of grief and pain Are found deceitful, light and vain, For thou dost never change.

But thou art emblem of the friend, Who, whatsoe'er our lot, The balm of faithful love will lend, And, true and constant to the end,

May die, but alter not. -Strickland.

I BLUSH to think what I have said -
But fate has wrested the confession from me:
Go on, and prosper in the paths of honor;

Thy virtue will excuse my passion for thee, And make the gods propitious to our love.
-Addison.

## Gemon fillossom

Uitrus limomum. Natural Order: Auranticece-Orange Family.


ITRUS LIMONUM, or Lemon tree, is a handsome tropical tree of easy culture in any climate (excepting, of course, the frigid zone), if given the protection of the house in winter, in cold latitudes. The foliage is small, glossy, dark and evergreen; the flowers similar to the orange, and very fragrant. The fruit, as everyone knows, is a beautiful yellow, and is very aromatic, and the pulp is filled with a most excellent, cooling, acid juice. When loaded with fruit, such as is to be seen in tropical climates, it presents a magnificent appearance.\# Mrs. Loudon says, "the golden apples of the heathen are supposed to belong to this family."

## 具istretion.

PRUDENCE protects and guides us; wit betrays; A splendid source of ill ten thousand ways.
-Dryden.

QEAR me, Pomona, to thy citron groves, To where the lemon and the piercing lime, With the deep orange glowing thro' the green,
Their lighter glories blend. -Thompsont.

CONSULT your means, avoid the tempter's wiles, Shun grinning hosts of unreceipted files, Let heaven-ey'd prudence battle with desire, And win the victory, though it be through fire. -Tanes T. Fields.
$\mathrm{B}^{\text {UT }}$ now, so wise and wary was the knight, By trial of his former harms and cares, That he decry'd, and shunnéd still his sight. The fish that once was caught, new bait will hardly bite.
-Spenser.

THUS I shall be fairer to your untried thought, Than if all my living into yours were wrought.
Hearts' dreams are the sweetest in a lonely nest:
Leave me while you love me-this is surely best!
-Howard Glyndon.

E knows the compass, sail and oar, Or never launches from the shore; Before he builds, computes the cost, And in no proud pursuit is lost. -Gay.

NONE pities him that's in the snare,
And, warn'd before, would not beware.

## 稅此tux.

\{actuca saliva. Natural Order: Composita-Aster Family.
 form the appetizing salads of which they are the chief ingredient. They are of very ancient cultivation, as they are mentioned by several Latin authors, and the selling of lettuce formed the occupation of people in those days as now in our own. Lettuce dealers were called Lactucaius, though they probably sold other vegetables. \# After the season () is over, the plants are allowed to go to seed. The stalk is about two ; feet high, filled with a milky juice; and the flowers are a pale yellow, numerous, but rather small in size.

## 

## T HAVE not from your eyes that gentleness <br> And show of love, as I was wont to have.

-Shakespeare.

VOUR coldness I heed not, your frown I defy;
Y Your affection I need not - the time has gone by, When a blush or a smile on that cheek could beguile My soul from its safety, with witchery's smile.
-Mrs. Osgood.

$\mathrm{H}^{1}$IS heart was all on honor bent, He could not stoop to love; No lady in the land had power His frozen heart to move.
-Anonymous.

OT the basilisk
More deadly to the sight, than is to me The cool, ingenious eye of frozen kindness.
 Your eyes are black as ripened sloes, Like diamonds do they glitter.

I do not flatter like a fool -
The diamond is a cutting tool, The rose is thorny, snow is cool,

And sloes are very bitter.




## quant ficart。

引plogustegia Dirgiuiaua．Natural．Order：Labiata－Mint Family．



ATIVE to various portions of the Southern and Western States，this plant may occasionally be found beautifying our gardens，where it thrives well and increases rapidly．It is rather handsome in appearance，varying from one to four feet （10．${ }^{3}$ ，in height，with a square，thick，upright stem．The leaves appear opposite each other，and are large and glossy，and a dark green in color．The flowers are on the tops of the branches， in a four－rowed spike．They are a pale purple in tint，with spots on the inner side．The plant blooms freely during August and September．There are no special virtues ascribed to the Physos－ tegia．The botanical name（from the Greek）signifies a bladder－like covering，from the puffed or inflated appearance of the corolla．

## Bravery．

COMMANDING，aiding，animating all，
Where foe appear＇d to press，or friend to fall．

## －Byron．

THE brave man seeks not popular applause， Nor，overpower＇d with arms，deserts his cause； Unshamed，though foiled，he does the best he can； Force is of brutes，but honor is of man．
－Dryden．

THE brave man is not he who feels no fear， For that were stupid and irrational；
But he whose noble soul its fear subdues， And bravely dares the danger nature shrinks from． －Joanna Bailie．

True valor
Lies in the mind，the never－yielding purpose， Nor owns the blind award of giddy fortune．
－Thompson．
NO fire nor foe，nor fate，nor night， The Trojan hero did affright，
Who bravely，twice，renewed the fight． －Sir．F．Denham．



## gitumst,

Robinia pseudacacia. Natural. Order: Leguminosa-Pulse Family.


OBINIA, the botanical name of the Locust, is derived from the Latinized surname of John Robin, an eminent botanist enjoying厚 the patronage of Louis XIV., and was bestowed in honor of his memory; and pseudacacia denotes false acacia. There are no extensive forests of this tree on the American continent, but it is found mixed with other trees in various localities. It is much planted for groves and shade trees around rural residences. The foliage, though small, is beautiful, and during the spring an abundance of fragrant blossoms burden the air with their perfume. The wood is sometimes used in the mechanical arts, being hard, close grained and

## Witisutult

CUCH is life: all fair today, dark tomorrow, dull and gray; Changing ever, like the moon, or the fleecy clouds of June. -I. H. Clinch.
$T$ HUS doth the ever-changing course of things
Run a perpetual circle, ever turning;
And that same day that highest glory brings, Brings us unto the point of back-returning. -Daniel.
$\mathrm{E}^{\mathrm{RE}}$ mirth can well her comedy begin, The tragic demon oft comes thundering in, Confounds the actors, damps the merry show, And turns the loudest laugh to deepest woe.
-Wilson.

$$
\begin{aligned}
& \bigcup^{H!} \text { life is a waste of wearisome hours, } \\
& \text { Which seldom the rose of enjoyment adorns; } \\
& \text { And the heart that is soonest awake to the flowers, } \\
& \text { Is always the first to be touch'd by the thorn. } \\
& - \text { Moore. }
\end{aligned}
$$

S there no constancy in earthly things?
No happiness in us but what must alter?
No life, without the heavy load of fortune?

What miseries we are, and to ourselves!
Ev'n then when full content seems to sit us, What daily sores and sorrows.

T
HE pang that wrings the heart today, Time's touch will heal tomorrow.
-Mrs. Ellet.


## $\underset{\sim}{q} \mathfrak{n p r i n e}$.

Cupinus poluplgullug. Natural Order: Leguminosa-Pulse Family.


MONG our handsomest native plants, the Lupines find a recognized place, more especially the above, which is a fine variety from Oregon. Its height is from three to four feet, the foliage soft and silky, and the flowers yellow, purple, or onge, white. There are numerous other varieties from different筫等 parts of the United States, both annual and perennial. The Lupinus mutabilis (changeable) is from South America, and is said to be changeable in the color of its blossoms. The ancients used a species of Lupine for food, thinking it strengthened the intellect; and on the stage the seeds were used by the players instead of real money. The Latin name signifies wolfish, from lupus, a wolf, as it absorbs the fertility of the soil, to the detriment of other things; and polyphyllus, from the Greek, denotes many-leaved.

## Varatimutyest.

$\left\{\begin{array}{l}\text { HE turnpike road to people's hearts, I find, } \\ \text { Lies through their moutins, or I mistake mankind. }\end{array}\right.$
-Dr. Walcot.

J'M quite ashamed - 'tis mighty rude
To eat so much - but all's so good
I have a thousand thanks to give-
My lord alone knows how to live.
-Pope.

'T'IS holyday; provide me better cheer; 'Tis holyday; and shall be round the year; Shall I my household gods and genius cheat, To make him rich who grudges me my meat?

- Dryden.

COME men are born to feast, and not to fight;
Whose sluggish mind, e'en in fair honor's field,
Still on their dinner turn. -Foanna Baillie.
$B^{E Y O N D}$ the sense
Of light refection, at the genial board
Indulge not often; nor protract the feast

To dull satiety; till soft and slow
A drowsy death creeps on th' expansive soul, Oppress'd and smother'd the celestial fire. -Armstrong.

NOT all on books their criticism waste,
The genius of a dish some justly taste,
And eat their way to fame. -roung.

## THagnolia.

filaguolia grautiflora. Natural Order: Magnoliacea-Magnolia Family.
$\qquad$
 F all the flowers bestowed upon the South, there is none to which a Southerner refers with more pride than to the blossums of this elegant tree. The Magnolia grandiflora flourishes throughout most of the Gulf States and on the Atlantic coast as far north as North Carolina. It grows chiefly in swampy lands, yet attains its greatest height in a light, fertile soil, where, if planted by itself, it will assume the shape of a perfect pyamid. The leaves are evergreen, the old ones forming a striking contrast to the young and tender foliage, which is of a much lighter shade. The flowers are of the purest white, about eight or nine inches in diameter, and fill the air with their honeyed fragrance. As the slightest injury causes the blossom to soon turn brown, they have often been used as a medium of communication between lovers or friends. It was only necessary to write the message with some pointed instrument on one of the broad petals, and cause the flowers to be delivered in a bouquet to the person desired, and the wounded parts would soon betray the secret committed to the floral page.

## Same of Tatary

> NATURE is man's best teacher. She unfolds Her treasures to his search, unseals his eye, Illumes his mind, and purifies his heart, An influence breathes from all the sights and sounds Of her existence; she is wisdom's self. -Street.

$$
I
$$ LOVE thee for the blossoms and the bees,

The hills, the vales, the mountains and the seas; The winds, the clouds, the skies of azure blue, The moon, the stars, and planets circling through;

0NATURE! how in every charm supreme! Whose votaries feast on raptures ever new! $O$ ! for the voice and fire of seraphim, To sing thy glories with devotion due! -Beattic.

The earth, the sun, and everything that's fair, Above, below, all round and everywhereThe soul, the mind, to their Creator call, To him, the Father, First and Last of all. -Late.
$T \mathrm{HE}$ green earth sends its incense up From every mountain shrine -
From every flower and dewy cup
That greeteth the sunshine. -Whittier.




## Thaxjoxam--sweet.

## (Origaumm majorana. Natural Order: Labiata-Mint Family.



HEN our grandsires flourished, and almost every plant received some familiar, diminutive appellation that seemed to bring it等into closer association with humanity than our now high$m_{\mathrm{m}}$ sounding names, this plant was called Sweet Marjory. It is very aromatic, and is grown more frequently as an herb for kitchen use than for ornament, and is useful in seasoning various articles of food. \#The flowers are pink, blooming in spikes. It is a native of Portugal. There is also a wild variety found in fields, and sometimes in the woods, that has nearly white flowers, and much the same properties as the other. The literal meaning of the name (from the Greek) is "joy of the mountain."

## Blustas.

CONFUSION thrill'd me then, and secret joy,
Fast throbbing, stole its treasures from my heart, And mantling upward, turned my face to crimson.
-Brooke.
$\bigcap^{\mathrm{N}}$ Beauty's lids the gem-like tear Oft sheds its evanescent ray,
But scarce is seen to sparkle, ere
'Tis chased by beaming smiles away;

Just so the blush is formed - and flies Nor owns reflection's calm control;
It comes, it deepens - fades and dies,
A gush of feeling from the soul. -Anue Peyre Dinuies.

FROM every blush that kindles in thy cheek,
Ten thousand little loves and graces spring,
To revel in the roses.
-Roze.

दOR I that old, old story had told The story of anxious hopes and fears While over her ringlets' dark-brown gold Was falling a shower of pearly tears -

Tears that hung on her eyelids' fringe
Like dew on the fresh-born buds of May And her blushes deepened their roseate tinge, As I tenderly kissed those tears away. -Sallie A. Brock.
$\bigcup^{\mathrm{H} \text { ! little blush that comes and goes, }}$ Are you a blush, or yonder rose
I see reflected? -George Cooper.

## citathinda.

Aflatthiola amua. Natural Order: Crucifera-Mustard Family.
 P. A. Mattioli ( $1500-1577$ ), this flower has always commanded more attention in Europe than it has in America. There it ris really the flower of the people; and in cities nearly every ${ }^{5}$ window ledge must have its pot of Stock, to cheer by its presence, and serve as a reminder to its possessor, that there is a world of nature outside and beyond the turmoil and strife of city life. In the garden it is even more desirable, the plant assuming a pretty, upright habit, branching symmetrically, with the flowers arranged close around the upper parts of the stems or branches. The Tenweek Stock is an annual and requires no particular care. The perennial and biennial kinds should be protected during winter by some covering - a hotbed sash, or something equally good, as in cold climates they are apt to be winter-killed. They are all desirable plants; the colors are the various shades of red, crimson, yellow, purple, white, blue and rose.

## Pramplituta.

CEIZE, mortals, seize the transient hour; Improve each moment as it flies:
Life's a short summer - man a fiower.

## -Anonymous.

WHILST timorous knowledge stands considering, Audacious ignorance hath done the deed; For who knows most, the most he knows to doubt; The inaudible and noiseless foot of time The least discourse is commonly most stout. Steals, ere we can effect them.
-Daniel.
ET us take the instant by the forward top, 1 For we are old, and on our quick'st decrees;
-Shakespeare.

TAKE the instant way; For honor travels in a strait so narrow, Where one but goes abreast.

- Shakespeare.

CHUN delays, they breed remorse;
Take thy time, while time is lent thee; Creeping snails have weakest force,

Fly their fault, lest thou repent thee.
Good is best when soonest wrought;
Lingering labors come to naught.

## 

filaurandia sempernirens. Natural Order: Scrophulariacea-Figwort Family.
 of hanging-baskets or window-boxes, and are used by florists for that purpose. They are perennial, but as they bloom the first season after planting, are used for summer decoration out of doors, and of course perish on the approach of frost, except removed to the house. $\mathbb{H}^{\text {The }}$ name has been given in honor of Prof. Maurandy.

## Cantraty.

O gently blending courtesy and art,
That wisdom's lips seem'd borrowin
That wisdom's lips seem'd borrowing friendship's heart. - O. W. Holmes.

SHEPHERD, I trust thy honest offered courtesy, Which oft is sooner found in lowly sheds With smoky rafters, than in tap'stry halls And courts of princes.

- Milton.

A SMILE for one of mean degree, A courteous bow for one of high, So modulated both that each

Saw friendship in his eye.
-Henry B. Hirst.

TUDY with care politeness, that must teach
The modish forms of gesture and of speech.
-Stilling fleet.

WOULD you both please and be instructed too, Watch well the range of shining, to subdue;
Hear every man upon his favorite theme,

And ever be more knowing than you seem; The lowest genius will afford some light, Or give a hint that had escaped your sight. - Stillingffeet.

LL seemes (sayd he) if he so valient be,
That he should be so sterne to stranger wight;
For seldom yet did living creature see
That courtesie and manhood ever disagree.

## dutaymuex．

Iflaruta cotula．Natural Order：Composite－Aster Family．
$\qquad$

－．．．ancosono
ERHAPS the commonest of all uncultivated plants is this roadside outcast，growing from the deep－rutted soil，utterly disregarding all the ordinary conditions required for herbal perfection，it sports its numerous blossoms，and during the whole summer its flowers make white the borders of the dusty way．It is an annual，though so abundant as to seem perennial，and only the greatest perseverance can eradicate it or reduce it to subjection．Of European origin，it was probably introduced with grain．The flower is really pretty，combining the purest of yel－ low，with the most opaque white，in an admirable and artistic manner， and could it only have been odorless and rare，would have been received with ecstatic admiration，instead of contumely and contempt．丰 The origin of the botanic name Maruta is obscure，and its meaning is quite uncertain．Cotula was the half－pint measure of the Greeks and Romans．

## Rumur．

THE flying rumors gather＇d as they roll＇d； Scarce any tale was sooner heard than told， And all who told it added something new， And all who heard it made enlargement too； In every ear it spread，on every tongue it grew． －Pope．

I FROM the Orient to the drooping West， Making the wind my post－horse，still unfold The acts commenced on this ball of earth： Upon my tongues continual slanders ride， The which in every language I pronounce， Stuffing the ears of men with false reports．
－Shakespieare．

A WHISPER woke the air－ A soft，light tone，and low， Yet barb＇d with shame and woe，－ Now，might it only perish there！ No farther go！
－Mrs．Osgood．

RUMOR is a pipe
Blown by surmises，jealousies，conjectures， And of so easy and so plain a stop， That the blunt monster with uncounted heads－ The still discordant，wavering muititude－ Can play upon it．

## dtudizk.

$\mathfrak{f l l e d i} \mathfrak{a} \mathfrak{g}$ saliva. Natural Order: Leguminose-Pulse Family.


UROPE has long been the seat of the Medick, which has become thoroughly naturalized there, though it is supposed have been originally derived from the ancient Media (now Northern Persia), whence its name. It is of the same order as the clover, and is somewhat naturalized and cultivated in America for the same purpose, but it has not proved as valuable, being probably not as well adapted to the climate. It is of perennial growth, with stems about a foot and a half high. The Medicago scutellata, is an annual of the same class, and is grown in the garden for its curious seed vessels, resembling snail shells, which gives the familiar name of Snails to the plant. The Medicago intertexta, called hedgehog, has prickly pods, and is cultivated for ornamental purposes, as are some others of the same species. The pods are used in winter bouquets along with dried grasses of various kinds.

## \#gritufture

$\mathrm{R}^{\mathrm{E}}$EAP well, scatter not, gather clean that is shorn, Bind fast, shock apace, have an eye to thy corn.

- Tosser.

WILT thou repine To labor for thyself? and rather choose To lie supinely, hoping heaven will bless Thy slighted fruits, and give thee bread unearned? - John Philips.

WHO abuseth his cattle and starves them for meat, By carting or ploughing his gain is not great;
Where he that with labor can use them aright, Hath gain to his comfort, and cattle in plight. -Fusser.

CIVE me, ye gods, the product of one field, I That so I neither may be rich nor poor; And having just enough, not covet more. -Dryden.

YOU sunburns sickle men, of August weary, Come hither from the furrow, and be merry.


## 

proserpinafa palustris. Natural Order: Onagracea-Evoning Primrose Family.


## Refestitn.

> FULL soon, I know it, while they shall strain to free not, From these idolatrous arms you shall be torn;
> You are fated from my days to pass and be not, Like all of rare and fair they have ever worn!
> I am doomed, although the stealthy doom I see not;
> I feast, albeit I die tomorrow morn! -Edgar Fazucett.

THE ship which goes to sea inform'd with fire,Obeying only its own iron force,
Reckless of adverse tides, breeze dead, or weak As infant's sporting breath, too faint to stir The feather held before it,-is as much The appointed thrall of all the elements,

THE grass withereth, the flower fadeth, Ay, and I know "'tis well,"
For they shall live again when springtime's Sweet birdlings' songs shall tell, Above their knell. -Charlotte Cordner.

As the white bosom'd bark which wooes the wind, And when it dies desists. And thus with man: However contrary he set his heart To God, he is but working out His will, And at an infinite angle, more or less Obeying his own soul's necessity. -Bailey.

ATE - soon or late,
The longest day hath end;
If the summer wait,
The winter still must wend
With sad steps and slow unto the fields of Fate.







## THMXexy.

Derbascum thapsug. Natural Order: Scrophulariacea-Figwort Family.


ERBASCUM, or Mullein, is a common wayside plant, that ${ }_{3}$, we will dignify with a place in this volume as a slight recompense for the abuse it has ever, and will ever, receive. Condemned as a weed, considered as evidence of an untidy landholder wherever it is seen occupying the fields, its stately stalk a target for every roadside rambler's stick, it has at least some virtues, and less vice than it generally obtains credit for, and shall receive a tribute for the memory of childhood, when we remember seeing its golden blossoms so far above our head. The whole plant presents a gray appearance, from the dense woolly texture that covers its leaves and stalk. It is said to have been used in ancient times as wicks for lamps, or was placed in small vessels of oil, and one end lighted, the oil continually creeping up its dense surface, supplying the flame with fuel; and many a country lassie has been indebted for her rosy cheeks to a pilfered leaf, whose rough surface she has furtively applied to her smooth skin. \# The plant has several medicinal properties, being demulcent, anti-spasmodic, and useful as an anodyne. The German name is zollkraut, signifying wool-plant.

$$
\begin{aligned}
& \text { Crant Matura. } \\
& \text { COOD humor only teaches charms to last, } \\
& \Psi_{\text {still makes new conquests, and maintains the past. }} \\
& - \text { Pope. }
\end{aligned}
$$

 Amid a jarring world.
—Thompson.

ASWEETER and a lovelier gentleman, Framed in the prodigality of nature, The spacious world cannot again afford.

T

- HOUGH time her bloom is stealing, There's still beyond his artThe wild-flower wreath of feeling,

The sunbeam of the heart. -Halleck.

## 

flimulus moschatus．Natural Order：Scrophulariacea－Figzoort Family．


T few things in nature have the odor of musk，particularly in the vegetable kingdom；and this little，unobtrusive plant， so delicate and fragile，is cultivated for this property，other－ wise it would be passed by for its more showy sisters；yet its blossoms look like drops of yellow gold among its pale－ green leaves．It is a native of Oregon．The other varieties of the Mimulus are grown for their curious and striking flowers， which are usually yellow，velvety，and spotted with crimson，maroon，or brown．They are well adapted for garden or house culture，but require moisture，and a little shelter from the scorching sun．$\#$ Mimulus is derived from the Greek mime，signifying an ape，from the grinning appearance of the corolla．Another variety is known as the Mimulus ringens，or Monkey－flower．

## H Meeting．

A
HUNDRED thousand welcomes！I could weep， And I could laugh；I am light，and heavy；welcome．

THERE＇S not a fiber in my trembling frame That does not vibrate when thy step draws near； There＇s not a pulse that throbs not when I hear Thy voice，thy breathing，nay，thy very name．
－Frances Kemble Butler．

WHEN lovers meet in adverse hour，
＇Tic like a sun－glimpse through a shower，
A watery ray an instant seen， Then darkly－closing clouds between．
-Stol.

ND doth not a meeting like this make amends
For all the long years I＇ve been wand＇ring away－ To see thus around me my youth＇s early friends， As smiling and kind as in that happy day？

T gives me wonder，great as my content，
To see you here before me．－Shakespeare．
$T$ HE joy of meeting pays the pangs of absence， Else who could bear it？
－Rowe．

IN that same place thou hast appointed me Tomorrow truly will I meet with thee．

## 解以staxd．

Siuapis alba．Natural Order：Crucifcra－Mustard Family．


## 

> $A^{\text {LAS！my lord，if talking would prevail，}}$
> I could suggest much better arguments Than those regards you throw away on me．

> - Young.

ET me this fondness from my bosom tear：
Let me forget that e＇er I thought her fair； Come，cool indifference，and heal my breast；

Wearied，at length，I seek thy downy rest－ Not all her arts my sfeady soul shall move， And she shall find indifference conquers love．

- Lyttleton．

A GRACIOUS person；but yet I cannot love him：
He might have took his answer long ago．
－Shakespeare．
$\mathrm{B}^{\mathrm{UT}}$ in those lands where people are， Few men at all take any heed； While still he sings，and from afar，

So beautiful is the song，indeed That twilight loiters hours to hear， Eavesdropping with a roseate ear．
－Edgar Farucett．

## ghaxtle.

Alluths communis. Natural Order: Myrtacer-Myrtle Family.


```
来
```

 THENS adopted the Myrtle as an emblem of municipal authority, and the victors in the Olympic games were crowned with wreaths of it; it was also sacred to Venus, the goddess of love, and her temples were encompassed with groves of Myrtle. We find in Virgil, that in Baiae (a small town in Campania, on the coast between Cumae and Puteoli, a favorite resort of the Romans on account of its warm baths and pleasant location), "there was a large Myrtle grove, where a warm, sudorific vapor rose from the earth." King Faunus beat Bona Dea, his wife, to death with myrtle rods, because she lowered the dignity of a queen by becoming intoxicated with wine. He afterward repented his severity, deified, and paid her divine honors. It is a handsome, ornamental evergreen shrub, grown usually in the greenhouse, and was much admired by the ancients for its elegance and fragrance.

## Thume.

$\bigcup^{\mathrm{H}, \text { love! thou sternly dost thy power maintain, }}$ And wilt not bear a rival in thy reign; Tyrants and thou all fellowship disdain. -Dryden.

OOVE knoweth every form of air,

- And every shape of earth;

And comes, unbidden, everywhere,
Like thought's mysterious birth.
-Willis.

TOVE is a pearl of purest hue,
But stormy waves are round it, And dearly may a woman rue

The hour that first she found it.
-Miss Landon.

ASUBTLE, unbound power, That slips the soul from its prison fair And makes it buoyant and lighter than air.
$-C . H . T$.

T
RUE, ah! true, and well I márk
All your words would teach -
And my soul beyond the dark
Stretches forth to reach

Faith yet fuller, more complete,
While my lips attest
It is love makes heaven sweet Love is more than rest! - Mary B. Dodge.

## gixstuxtixn

©ropeolum majus. Natural Order: Tropaolacere—Nasturtium Family. known species mentioned above. The Canary Bird Flower, Tropeolum aduncum is said, when fully grown, to live on air alone if detached from the roots. They are all natives of Peru.

## 

VET it may be more lofty courage dwells
In one weak heart which braves an adverse fate,
Than his whose ardent soul indignant swells,
Warm'd by the fight, or cheer'd through high debate.
-Mrs. Norton.

THE wise and active conquer difficulties By daring to attempt them; sloth and folly Shiver and sink at sights of toil and hazard, And make the impossibility they fear. helmet, and the leaf to a shield. Hence the botanical name, from the Greek tropaon a trophy, which meant strictly the pile of captured helmets, shields etc., raised by the victorious party on the field of battle. The vernacular Nasturtium is from the Latin nasus tortus, twisted nose, because of the pungency of the plant. There are also two or three tuburous or bulbous varieties, that are as yet rather unfrequent in cultivation, and are more delicate in foliage and flower than the well F this handsome class of plants, there exists quite a number of annual varieties, some of which are dwarf or low-growing, others climbing five or six feet high, adhering to their support by their long leaf-stalks. The flowers are brilliant, usually of some shade of orange or yellow, combined with red, crimson, maroon, or carmine, and in shape very aptly compared to a




## (i) $\mathfrak{d K}$

Obelus alba. Natural Order: Cupuliforce-Oak Family.


23 The CERY one is familiar with the appearance of this noble genus of trees, or has read more or less in its praise. The wood or timber of many of the varieties is exceedingly useful to man, in many of the mechanical arts, but more especially in ship-building, on account of its great strength and durability. It is also of historic interest to all Americans, as it was in the hollow of an oak at Hartford, that the Charter obtained by Gov. Winthrop, the younger, for the colonists of Connecticut, from Charles I. of England, was secreted from October 31, 1687, to May, 1689. Sir Edmund Andros made an unsuccessful attempt to rob them of it, but was thwarted by William Wadsworth, who spirited it off and hid it in the Oak, which from this circumstance was called the Charter Oak. It is supposed to have been upward of three hundred years old when blown down by a storm, Aug. 20, 1856. The Oak has been considered by the heathen as honored above all other trees, because the sacred mistletoe grows upon its branches.

## Thar.

THESE be the sheaves that honor's harvest bears;
The seed thy valiant acts; the world the field.
-Fairfax.

$\mathrm{H}^{\circ}$OXOR and shame from no condition rise: Act well your part, there all the honor lies. -Pope.

MINE honor is my life; both grow in one; Take honor from me, and my life is done. -Shakespeare.

HEAV'N, that made me honest, made me more Than ever king did when he made a lord.
-Rove.

CO much the thirst of honor fires the blood;
So many would be great, so few be good; For who would virtue for herself regard, Or wed without the portion of reward?
$\varlimsup^{\mathrm{HE}}$ tall oak, towering to the skies, The fury of the wind defies;
From age to age, in virtue strong, Inured to stand and suffer wrong.
-Montgomery.


## (1) leandex.

## Nerium (Olemuler. Natural Order: Apocynacce-Dogbane Family.



ROWING erect and branching regularly, this tall evergreen shrub keeps a good shape with very little attention. The most common species have rose-colored, single or double flowers, while some of the others are red, striped, crimson and white, and one pure white, partly double. The flowers of the latter are apt to scorch if too much exposed to the burning rays of a midday sun when in bloom. All of these varieties are natives of the Levant and some parts of Palestine, growing near streams in those localities, but are quite common in house cultivation in America, being placed out of doors in summer. In Florida it is found in swampy lands, attaining the size of a tree. The Oleander belongs to a very poisonous family, and no part should be placed in the mouth, as instances of occasional fatality are on record.

## 

ET no man know thy business save some friend,
A man of mind. -Bailey.

FF light wrongs touch me not,
No more shall great; if not a few, not many ; There's naught so sacred with us but may find A sacrilegious person; yet the thing is No less divine 'cause the profane can reach it.
--Tonson.
$B^{\text {EWARE }}$ of desperate steps; the darkest day, Live till tomorrow, will have passed away.
-Cowper.
UNCERTAIN ways unsafest are,
And doubt a greater mischief than despair. -Sir 7. Denhan.
$T \begin{gathered}\text { HEN fly betimes, for only they } \\ \text { Conquer love, that run away. }\end{gathered}$

> - Carezu.
$T$ HOSE edges soonest turn that are most keen,
A sober moderation stands sure,
No violent extremes endure.
$\Lambda$ VALIANT man
Ought not to undergo or tempt a danger, But worthily, and by selected ways.


## (1) lixue.

## Olea \&aropaca. Natural Order: Oleacea-Olive Family.


——ncerser
HIEFLY cultivated for its fruit, the Olive abounds in Spain, Italy, and the southern parts of France. The fruit is first bruised to the consistency of paste, after which it is mixed with hot water, and strained through flannel sacks. The oil is then separated from the water, and bottled or barreled for transportation as the Olive oil of commerce. \# Minerva (in Greek, Athené), the goddess of war, wears a crown of Olive leaves as an emblem of peace; for, say ancient authors, "war is only made that peace may follow." It is said, also, that when she was disputing with Neptune about the name of a city, she catused an Olive tree to spring out of the ground, which being considered more useful to man than the horse her competitor brought, she had the privilege of calling the city Athenæ, after her own name. This is the Athens of our time.

## Tetat.

$\triangle$ PEACE is of the nature of a conquest;
For then both parties nobly are subdued, And neither party loses.
-Shakespeare.
$A^{\text {NGEL }}$ of Peace, thou hast wandered too long;
Spread thy white wings to the sunshine of love, Come while our voices are blended in song,

Fly to our ark like the storm-beaten dove.
-O. W. Holmes.

YOVELY concord, and most sacred peace,
1 Doth nourish virtue, and fast friendship breeds;
Weak she makes strong, and strong things does increase,
Till it the pitch of highest praise exceeds.

- Spenser.

PEACE, thy olive wand extend,
And bid wild war his ravage end.
-Burus.

D
OWN the dark future, through long generations, The echoing sounds grow fainter, and then cease;
And like a bell with solemn, sweet vibrations,
I hear once more the voice of Christ say Peace, The holy melodies of love arise. -Longfellow.
PEACE o'er the world her olive wand extend,
And white-robed Innocence from heaven descend.




## (1) $\mathfrak{y m u x i d a}$

(1)smunùa regalis. Natural Order: Filices-Fern Family.


N England this fern is called Royal Osmunda, as its Latin name signifies, and is given a place in the ferneries of the most fastidious amateur. In America it is found in damp meadows and swampy lands, sending up its fronds sometimes three and four feet high, but in less damp and congenial places it diminishes its height nearly one half. There is scarcely anything more graceful than the Fern, of whatever species, from the common brake in the woods, or fence corners, to the most delicate tropical one cherished in hothouse or greenhouse. No glaring color to strike the eye, nothing but its own simple and elegant outline, and that ever-satisfying, restful and never-tiring tint of nature, the predominating green.

## 

$\mathbf{W}^{H Y}$, when the balm of sleep descends on man,
Do gay delusions, wand'ring o'er the brain,
Soothe the delighted soul with empty bliss?
-Dr. Fohnson.
$\mathbf{W}^{E L L}$ may dreams present us fictions, Since our waking moments teem
With such fanciful convictions
As make life itself a dream.

WHEN sleep's calm wing is on my brow, And dreams of peace my spirit lull,
Before me like a misty star
That form floats dim and beautiful.
-G. D. Prentice.

INNOCENT dreams be thine! thy heart sends up
Its thoughts of purity, like pearly bells,
Rising in crystal fountains. Would I were
A sound, that I might steal upon thy dreams,
And, like the breathing of my flute, distil
Sweetly upon thy senses.

DREAMS are the children of an idle brain, Begot of nothing but vain fantasy,
is as thin of substance as the air, Begot of nothing but vain fantasy,
Which is as thin of substance as the air, And more inconstant than the wind.
-Willis.
-Shakespeare.
$A^{\text {LAS! that dreams are only dreams! }}$
That fancy cannot give
A lasting beauty to those forms, Which scarce a moment live! - Rufuc Dazves.


## 

Jpeonia officinalig. Natural Order: Ranunculacea-Crowfoot Family.



HE Pæony is supposed to have derived its name from Pæon, a disciple of Æsculapius, who used it for the healing of Pluto, thereby arousing the jealous feelings of his preceptor, so much so indeed that he compassed his death. Both the root and leaves are used in medicine as an antispasmodic and tonic. The flowers are very large and showy in all the species. The common variety is a native of Switzerland; the white, of Tartary; the Siberian, as its name indicates, of Siberia. The Chinese Pæony is a shrub from three to four feet high, with ample foliage, and very large, brilliant, fragrant flowers. They are mostly hardy, except in extreme northern latitudes, and produce various colored blossoms.

## SHIHIIt.

SHAME sticks ever close to the ribs of honor, Great men are never found after it.

> -Middleton.

WHEN knaves and fools combined o'er all prevail, When justice halts and right begins to fail, Even the boldest start from public sneers, Afraid of shame, unknown to other fears.
$T$ HAT holy shame, which ne'er forgets What clear renown it us'd to wear; Whose blush remains when virtue sets, To show her sunshine has been there.

> CONFOUND me not with shame, nor call up all The blood that warms my trembling heart, To fill my cheeks with blushes.

I CAN bear scorpion stings, tread fields of fire,
In frozen gulfs of cold, eternal lie;
Be toss'd aloft through tracts of endless void, But cannot live in shame. - Foanna Baillie.

THE mind that broods o'er guilty woes Is like a scorpion girt by fire; In circle narrowing as it glows, The flames around their captive close.
-Byron.
COME seek to salve their blotted name
With others' blot, till all do taste of shame.





## 

鲃隹stemom campanulatus. Natural Order: Scrophulariacea-Figwort Family.


APIDLY advancing in favor since its introduction from Mexico, the Pentstemon is a handsome plant, finding a place in every garden when its beauty is once beheld; but it should be wintered in a cool part of the greenhouse, or some place free from frost. It can be raised from seed, and is said to bloom the first year if sown early in the spring. The blossom is tubular in shape, hanging three or four in a group, with the mouth of the flower downward. The color differs in different individuals, being scarlet, blue, and yellow, all remarkably handsome in whatever hue they sport. The stalk is from eighteen to twenty inches or more in height. They make nice conservatory or window plants, and will please all amateurs.

## 

> BOAST not these titles of your ancestors, Brave youths, they 're their possessions not your own; When your own virtues equal'd have their names, 'Twill be fair to lean upon their fames, For they are strong supporters.
> -Ben 7onson.
> $A^{\text {CROSS }}$ the garden path she went, Herself the sweetest flower there, Though richest blooms of Orient

> Their fragrance mingled in the air. Her swarthy bondmaids held aloft

> A canopy of colors gay,

PUT off your giant titles, then I can Stand in your judgments' blank and equal man, Though hills advancéd are above the plain, They are but higher earth, nor must disdain Alliance with the vale; we see a spade

Or brushed with tufts of plumage soft The humming insect tribe away.
For sun, nor wind, nor gauzy wing, Must venture on a touch too free; She was the daughter of a king,

And bore herself right royally. -Mary E. Bradley.

Can level them, and make a mount a glade; Howe'er we differ in the herald's book, He that mankind's extraction shall look In nature's rolls, must grant we all agree In our best parts, immortal pedigree. -Dr. Henry King.



## 

引Jetunia argentea. Natural Order: Solanacea-Nightshade Family.


ELONGING to the same order of plants as the tobacco, the Petunia is a native of South America, and derives its name from petun, a name for tobacco among the aborigines of that quarter. Of late years foreign florists have taken infinite pains to improve it by hybridizing, and have succeeded in producing some that are most exquisite in color, being plain, blotched, or striped, and nearly as double as a rose. This has only been accomplished after numerous discouragements. As the double ones rarely produce seeds, and should they do so would seldom yield double flowers in return, the mode of procedure has been to take the pollen of the double flower and apply it to the stigma of the neverfailing single flower, having previously removed the pollen of the latter. The plants must then be grown and allowed to ripen under cover, to be sure that no bee or truant insect, searching for hidden sweets, shall shake off from its tiny legs any of the pollen that may have adhered while wantoning over single blossoms.

## 

> M deeds and speeches, sir,
> To do, I'll do. Tres from one center; what I promise
> -Daniel.

THE man that is not in the enemies' pow'r, Nor fetter'd by misfortune, and breaks promises, Degrades himself; he never can pretend To honor more.
-Sir Robert Stapleton.

ET not thy tongue too often bind thy will,
To render deeds unto thy foe or friend,
For words once utter'd thou must erst fulfill,
Lest sweetest friendship have inglorious end

DIVINEST creature! bright Astrea's daughter! How shall I honor thee for this success? Thy promises are like Adonis's gardens, That one day bloom'd, and fruitful were the next -Shakespeare.

For hearts once lighten'd by a promise giv'n,
May sink too low for rescue shouldst thou fail, As ships reach not the port for which they've striv'n Except a favoring wind their sails prevail.

## Thtascolns．

那haseolus multitlorus．Natural Order：Leguminosa－Pulse Family．


NE of the plants that have been utilized by man for food，the Phaseolus，is familiar to all under the name of Bean．Some few are indigenous to the soil，but most of those grown，either for food or ornament，are from foreign lands．The Phaseolus vulgaris，that is so much grown for its edible pods，is from the East Indies，as are also the short Bush and Lima Beans， all three of which produce white flowers．The Phaseolus multiflorus， or Scarlet Runner，is an annual from South America．The blossoms are a brilliant scarlet，in which there is a slight dash of orange．There is also a variety with white and lilac flowers．The Hyacinth Bean is another handsome bloomer，and，with the two previously mentioned，is cultivated as an ornamental climber for screens，trellises and arbors．

## （2れturtutity．

THE means that heaven yields must be embraced， And not neglected；else，if heaven would， And we will not，heaven＇s offer we refuse， The proffer＇d means of succor and redress．－Shakespeare．

> I FIND my zenith doth depend upon A most suspicious star；whose influence If now I court not，but omit，my fortunes Will ever after droop．

MISS not occasion；by the forelock take That subtle power，the never－halting time， Lest a mere moment＇s putting off should make Mischance almost as heavy as a crime．
－Wordsworth．
$T \begin{gathered}\text { HE golden opportunity } \\ \text { Is never offer＇d twice；}\end{gathered}$
When fortune smiles，and duty points the way．
－old Play．
$T H E$ old Scythians Painted blind Fortune＇s powerful hands with To show her gifts come swift and suddenly， Which，if her fav＇rite be not swift to take， He loses them forever．
－Chapman．

〇CCASION，set on wing，flies fast away， Whose back once turned，no holdfast can we find；
Her feet are swift，bald is her head behind；
Whoso hath hold，and after lets her go，
Does lose the lot which fortune did bestow．


## 

Auagallis auvelisis．Natural Order：Primulacea－Primrose Family．


NAGALLIS is found growing in an uncultivated state in many places in Europe，so plentiful as to be classed as a weed．The flowers of this variety，which are scarlet，with a purple circle at the eye，open at eight o＇clock and close at noon，or at the approach of rain，thereby giving it the館客familiar cognomen of＂poor man＇s weather glass．＂It pos－ nesses acrid properties useful in medicine－dropsy，epilepsy and mania being the ailments for which the remedy is used．Its Latin appellative is derived from the Greek word anagelao，to laugh aloud．It is sup－ posed to be identical with the Samolus mentioned by Pliny，who says the ancient Druids gathered it fasting，and with the left hand，carefully refraining from casting their eyes upon it，and ascribing to it magical properties in the cure and prevention of diseases in their cattle．It is a pretty plant of a trailing habit，with beautiful flowers in the cultivated species， whose tints are blue，white，red，vermilion，and maroon．Its geographical dis－ tribution extends over various portions of the world．

## Mirt哲．

THE broadest mirth unfeeling folly wears， Less pleasing far than virtue＇s very tears．
-Pope. HERE is the man that has not tried How mirth can into folly glide， And folly into sin？

WHERE is our usual manager of mirth？ What revels are in hand？Is there no play To ease the anguish of a torturing hour？

W- Sir W．Scott．

HILE her laugh，full of life，without any control But the sweet one of gracefulness，rung from her soul， And where it most sparkled，no glance could discover， In lip，cheek，or eyes，for she brightened all over， Like any fair lake that the breeze is upon， When it breaks into dimples，and laughs in the sun．


## 

$\mathfrak{G a r r a c m i a}$ psittacina．Natural Order：Sarraceniacea－Pitcher Plant Family．
$\qquad$
ARRACENIA，so named in honor of Dr．Sarrasin，of Quebec， is found in low，wet situations in warm latitudes，and is remark－ able for the peculiar construction of the leaves，which are not flat，as in most other foliage，but are like hollow tubes，tapering toward the bottom like a vase，with a sort of cap or lid for the top，the hollow being nearly always half filled or more with water．There is one species from the East Indies that is well adapted for the greenhouse．The leaves of this plant are narrow 3and tapering，and the middle vein appears to run on in a sportive mood，extending itself like a thread beyond the leaf some four or five inches，and then curls about and turns up at the extremity，forming a delightful little pitcher．When grown in a pot，it requires a great deal of moisture，and a layer of moss or cocoa fiber on the surface of the soil to check evaporation．$\#$ Some varieties have leaves from one to three feet high．The flowers are yellow or purple．

## 島nstitut．

EARN from the birds what food the thickets yield；
Learn from the beasts the physic of the field； The art of building from the bee receive； Learn of the mole to plough，the worm to weave．
－Pope．

S
AY，where full instinct is the unerring guide， What hope or counsel can they need beside？ Reason，however able，cool at best， Cares not for service，or but serves when prest；

Stays till we call，and then not often near； But honest instinct comes a volunteer； Sure never to o＇ershoot，but just to hit； While still too wide or short is human wit．
$H^{O W}$ can we justly different causes frame， When the effects entirely are the same？
Instinct and reason how can we divide？
＇Tis the fool＇s ignorance，and the pedant＇s pride．

## aid $\ln \mathrm{m}$ biagyo.



## 

AMEEK mountain daisy, with delicate crest, And the violet whose eye told the heaven of her breast. -Mrs. Sigourney.

I LOVED thee for thy high-born grace,
「hy deep and lustrous eye-
For the sweet meaning of thy brow,
And for thy bearing high.

I loved thee for thy stainless truth, Thy thirst for higher things, For all that to our common lot

A better temper brings. -Willis.

ET so much is my poverty of spirit,
So mighty, and so many my defects,
That I would rather hide me from my greatness, Being a bark to brook no mighty sea.
-Shakespeare.
H UMILITY, that low, sweet root,
From which all heavenly virtues shoot.

HUMILITY is eldest-born of virtue, And claims the birthright at the throne of heav'n.

## Taxinsettix.

引joulsettia pulcherrima. Natural Order: Euphorbiacea-Spurge Family.


C OEL ROBERTS POINSETT, United States minister to Mexico, discovered, in 1828, this magnificent plant, one that excites such universal admiration when in its holiday trim. It is commonly grown among hothouse plants, though it will thrive in other situations with care and attention. It is a half-shrubby plant, much inclined to a straggling growth, and requires pruning about the second spring month, when it should be cut back to within about two inches of the wood of the previous year. This causes the plant to send out side branches, which must be preserved with care lest the ends of the twigs be broken. In midwinter the scarlet bracts or leaves which surround the flowers begin to appear, crowning the tip of each shoot as it were with fire, when it is the most brilliant, most magnificent plant in our collections. For decorative purposes it is much sought, and as the demand nearly always exceeds the supply, high prices are paid without demur for these floral tips.

## Briffianty.

$T \begin{gathered}\text { HE gay and glorious creatures! they neither "toil nor spin;" } \\ \text { Yet lo! what goodly raiment they 're all appareled in; }\end{gathered}$ Yet lo! what goodly raiment they 're all appareled in; No tears are on their beauty, but dewy gems more bright Than ever brow of eastern queen endiadem'd with light.

0ROSE! O pearl! O child! O things of light! How doth my soul leap forth to soul in thee, O maiden's eye that melts with beams of love! O stars that sparkle in the vault above! O peerless moon, thou radiant queen of night! O golden sun, so glorious in my sight!

$\mathrm{H}^{15}$IS earnest and undazzled eye he keeps [words Fix'd on the sun of Truth, and breathes his As easily as eagles cleave the air; And never pauses till the height is won.

To that appealing mute divinity Which gives thee glory as it gives thee might! 'Tis what we worship, though we know it not -Sallie A. Brock.

0 o what he will, he cannot realize Half he conceives - the glorious vision flies; Go where he may, he cannot hope to find The truth, the beauty pictur'd in his mind.
-Rogers.


## 

§apaner somuifermin. Natural Order: Papaveracer-Poppy Family. ROM this plant is obtained that powerful narcotic, the opium of commerce. It has a milky juice that exudes from incisions made on the capsules of the plant. After it has been collected, it is worked in the sun until it is firm enough to be Suv formed into cakes for exportation. Ceres is pictured carrying Doppies in her hand, because, when she lost her daughter, ${ }^{c}$ Jupiter gave her Poppies to eat, that she might get sleep and rest, which she could not before, for the intensity of her grief. \# The flowers are white, large and double. The Oriental Poppy from the Levant is a beautiful flower of a rich scarlet. The capsule is round, with a flat cap or covering, underneath which are small openings through which the seeds may be scattered as from a pepperbox.

## Sfept+

CLEEP, sleep! be thine the sleep that throws
Elysium o'er the soul's repose,
Without a dream, save such as wind,
Like midnight angels, through the mind:
-Robert M. Bird.

HOW beautiful is sleep!
Yet if its purest beauties thou wouldst feel,
On the babe's slumber creep,
And bid thy heart confess its mute appeal.

Yet sleep is awful, too-
So like to death's its features it can dress;
Meek slumberer! while I view
Thine own, I deeply feel its awfulness.

〇 MAGIC sleep: O comfortable bird
That broodest o'er the troubled sea of the mind
Till it is hush'd and smooth. O unconfined
Restraint! imprison'd liberty! great key
To golden palaces - ay, all the world Of silvery enchantment!
¡ROM a poppy I have taken
Mortal's balm and mortal's bane;
Juice that, creeping through the heart,

- Keats.

Deadens every sense of smart;
Doomed to heal or doomed to kill, Fraught with good, or fraught with ill. -Mrs. Robinson.

## 需 $10 x+m$ lixix.

JJortulaca granditlora. Natural Order: Portulacacee-Purslane Family.


LANTS cultivated under this name are mostly from South Africa, though the varieties are greatly improved, and florists have by a course of treatment produced a multiplicity of colors. In their native land they are found in very sandy soils, and there are no plants that stand drouth better than they, except, Wherhaps, the cacti. \# The flowers appear fresh every morning during flowering seasons, and the seeds when ripe are of a silvery appearance. The native weed known under the name of Purslane is an American sister-plant, entirely devoid of beauty. The latter has thick, fleshy stems and leaves, and is used as a pot-herb, also for pickles, salads, and garnishing, and for that reason is designated botanically Portulaca oleracea.

## Variaty.

HE earth was made so various, that the mind
Of desultory man, studious of change,
And pleas'd with novelty, might be indulg'd.
-Cowper.

WHEREFORE did nature pour her bounties forth With such a full and unwithdrawing hand, Covering the earth with colors, fruits and flocks, Thronging the seas with spawn innumerable But all to please and sate a curious taste.
-Milton

COUNTLESS the various species of mankind, Countless the shades which separate mind from mind;
No general object of desire is known; Each has his will, and each pursues his own.
-Gifford.
YOUTH loves and lives on change,
'Till the soul sighs for sameness; which at last Becomes variety; and takes its place. -Bailey.

VarteTY, the source of joy below,
From which still fresh revolving pleasures flow; In books and love the mind one end pursues, And only change the expiring flame renews.

DLAY every string in love's sweet lyre, Set all its music flowing;
Be air, and dew, and light, and fire,
To keep the soul-flower growing.
-Mrs. Osgood.
-Gay.

T
HAT each from other differs, first confess; Next, that he varies from himself no less.




## (1)uesx ar the fltwentow.

Spitua salicitolia. Natural Order: Rosacere-Rose Family.



EADOW lands in the United States and Canada are frequently the chosen seats of this small, slender shrub, which is on that account called Queen of the Meadow. It grows to a height of three or four feet, having a purplish stem, which is very brittle in texture. The flowers are commonly called white, but there is a flush of red over them, and they are remarkable for their fragrance. $\sharp$ The stamens, which are those threadlike organs within the corolla, are very attractive. The roots are possessed of some medicinal value, having certain tonic properties. It is frequently called Meadow Sweet, and is sometimes cultivated as an ornamental shrub, as are also several other species of this beautiful genus.

> Praisq.

TELLING men what they are, we let them see, And represent to them, what they should be.

> -Aleyn.

THE love of Praise, howe'er conceal'd by art, Reigns, more or less, and glows in every heart; The proud, to gain it, toils on toils endure, The modest shun it but to make it sure.
-roung.
$\bigcap^{R}$ who would ever care to do brave deed, Or strive in virtue others to excel,
If none should yield him his deserved meed,
Due praise, that is the spur of doing well?
-Sipenser.

> PRAISE of the wise and good! it is a meed
> For which I would long years of toil endure Which many a peril, many a grief, would cure.
-Sir E. Brydges.

CAST down thyself, and only strive to raise
The glory of thy Maker's sacred name;
Use all thy powers that bless'd power to praise,
Which gives the power to be and use the same.
-Sir 7. Davies.

I HAVE no taste of the noisy praise
Of giddy crowds, as changeable as winds; Servants to change, and blowing with the tide Of swoln success, but veering with its ebb. -Dryden.

HOU 'LT say anon he is some kin to thee,
Thou spend'st such heydey wit in praising him.





## 型hodoxa．

Mhodora $\mathfrak{C}$ madmisig．Natural Order：Ericacea－Heath Family．


## Braty in Metirement．

$T$ HE bloom of opening flowers＇unsullied beauty， Softness and sweetest innocence she wears，
And looks like nature in the world＇s first spring．

> -Rowe.

Rhodora！if the sages ask thee why This charm is wasted on the marsh and sky， Dear，tell them，that if eyes were made for seeing， Then beauty is its own excuse for being． Why thou wert there，O rival of the rose！

I never thought to ask；I never knew，
But in my simple ignorance suppose［you．
The selfsame Power brought me there，bro＇t
－Ralph Waldo Emerson．

0MAIDEN！silent sitting， Braiding still thy golden hair； Round thy head the bees are flitting， Deeming thee a lily fair．－G．Hamlin．

$$
A_{\text {I am fretted to the heart, }}^{H \text { ! thou wonder among women, }}
$$ Thinking how my words are few

To depict thee as thou wert： What I will，I cannot do！
－Howard Glyndon．
$T$ HINE eyes＇clear fervor dwell
Passionate on my own glad eyes so often， Because I know thou art My life＇s diviner part，
My other tenderer heart to soothe，to soften．
－Edgar Fawcetl．

胞

## worket.

fesperis matromalis. Natural Order: Crucifcra-Mustard Family.


ESPERIS has three species: one a native of the United States and found growing near Lake Huron, another from the cold latitude of Siberia, and a third a maritime herb found on the sea coast. The flowers are the various shades of purple or white. The odor of the blossom is much the strongest toward evening; hence the name Hesperis, being Greek for evening. $\|$ This spicy fragrance has been the cause of its being sometimes called gilliflower with which it is closely allied. The double varieties are produced by hybridizing, but yield no seeds themselves, fertile seeds being obtained from the single flower. The seeds should be sown in the early fall, and the plants kept in a place free from黊 frost for spring blooming. Choice specimens may be kept from year to year by pruning and clipping the flowers as soon as they have perished. The maritime variety is a smooth, thick, juicy, trailing plant, called SeaRocket.

## 

Was not one of the two at her side -
This new-made lord, whose splendor plucks
The slavish hat from the villager's head?
-Tennyson.
$\cap^{F}$ all the torments, all the cares,
With which our lives are curst;
Of all the plagues a lover bears,
Sure, rivals are the worst!
By partners in each other kind,
Afflictions easier grow;
In love alone we hate to find
Companions of our woe.

Sylvia, for all the pangs you see Are lab'ring in my breast, I beg you would not favor me Would you but slight the rest! How great soe'er your rigors are, With them alone I'll cope; I can endure my own despair But not another's hope. -William Walsh.

F one must be rejected, one succeed,
Make him my lord within whose faithful breast
Is fix'd my image, and who loves me best. -Dryder.

## 

Moge eglantería. Natural Order: Rosacea-Rose Family.
$\qquad$
OSES, as well as flowers of all other kinds, are very much cultivated by the flower-loving people of Germany, of which land Rose is a native. The flowers are of a brilliant yellow, and soon fall, but the green leaves of the bush are very fragrant. It is said that the essential oil, attar or otto of Roses, was first discovered by Nur Jehan, better known as Nur Mahal ("light of the harem"), wife of Jehanghir, Moghul emperor of Hindoostan, 1605-27. She observed an oily substance floating on a vessel of Rose-water that had been distilled by the heat of the sun. The attar is very fragrant, being so concentrated that one drop will perfume a whole dressing-case; and so expensive that an ounce will cost about one hundred dollars, requiring nearly half a million of average Roses for its production.

## Juntine

$T$ HAT loveliness ever in motion, which plays, Like the light upon autumn's soft, shadowy days,
Now here, and now there, giving warmth as it flies, From the lips to the cheeks. from the cheek to the eyes.

## -Moore.

0SWEET, pale face! O lovely eyes of azure, Clear as the waters of a brook that run Limpid and laughing in the summer sun! O golden hair, that, like a miser's treasure,

In its abundance overflows the measure! O graceful form, that cloudlike floatest on, With the soft, undulating gait of one Who moveth as if motion were a pleasure,
-Longyellow.
$A^{\mathrm{H} \text { ! could you look into my heart, }}$
And watch your image there,
You would own the sunny loveliness
Affection makes it wear. -Mrs. osgood.

HER face right wondrous fair did seem to be, That her broad beauty's beam great brightness threw Through the dim shade, that all men might it see.
-Spenser.

$\mathrm{H}^{\text {i }}$ER dress, her shape, her matchless grace, Were all observed, as well as heav'nly face; With such peerless majesty she stands.


## 


-Spenser.

IF Jove would give the leafy bowers
A queen for all their world of flowers, The rose would be the choice of Jove, And reign the queen of every grove.
-Moore.

CIVE me the eloquent cheek
Where blushes burn and die;
Like time, its changes speak
The spirit's purity.
-Frances Sargent Osgood.

EAUTY was lent to nature as the type
Of heaven's unspeakable and holy joy.
-Mrs. Hale.
$W^{\text {E are blushing roses, }}$
Bending with our fulness,
'Midst our close-capp'd sister buds,
Warming the green coolness.
Of all flowers,
Methinks a rose is best
It is the very emblem of a maid, For when the west wind courts her gently, How modestly she blows, and paints the sun With her chaste blushes!
-Beaumont and Fletcher.

Whatsoe'er of beauty
Yearns and yet reposes, Blush, and bosom, and sweet breath,

Took a shape in roses.
-Leigh Hunt.
$T \mathrm{HE}$ lilies faintly to the roses yield, As on thy lovely cheek they struggling vie; (Who would not strive upon so sweet a field

To win the mastery?)
And thoughts are in thy speaking eyes reveal'd, Pure as the fount the prophet's rod unseal'd.

## 

Rubus rogrfolius. Natural Order: Rosacec-Rose Family.


RECT and branching, the Rubus, sometimes called the Flowering Bramble, and sometimes the Brier Rose, is a bush well fortified with straight prickles, and with foliage resembling that of the raspberry bush, being smooth on the under, and velvety on the upper, surface. It is a very delicate plant, requiring the shelter of the greenhouse or conservatory in order to cultivate it successfully; but as it blooms at the season when nature has withdrawn her genial smiles, it has proved a very desirable acquisition to those who can give it such shelter, or a sunny window in the house. $\not$ The blossoms are double, and a pure, snow white. The Island of Mauritius claims its nativity, as does China, also. It is an especial favorite in England, being familiarly called the Bridal or Christmas Rose. The root is bulbous, and should be repotted in a large pot as early as October, in order that it may bloom well the following season, which commences about Christmas, and continues till May. It is propagated by a division of the stems after the flowering season has ceased.

## Thtrent

$$
\begin{aligned}
& 0_{\text {My majesty to be more terrible. }}^{\mathrm{H} \text { wert thou young again, } \mathrm{I} \text { would put off }} \\
& \text {-Lee. }
\end{aligned}
$$



Look to it well, and say you are well warn'd.

T'LL make my heaven in a lady's lap,
And deck my body in gay ornaments, And witch sweet ladies with my words and looks. -Shakespeare.

I HAVE learned thy arts, and now
Can disdain as much as thou.
-Thomas Carew.
$\mathrm{B}^{\mathrm{ACK}}$ to thy punishment,
B. False fugitive, and to thy speed add wings, Lest with a whip of scorpions I pursue Thy lingering.

THOUGH I'm young, I scorn to flit On the wings of borrowed wit; I'll make my own feathers rear me, Whither others cannot bear me.

## Thasemxixy

Rosmarimes officinalis. Natural Order: Labiata-Mint Family.


THINK of thee when soft and wide The evening spreads her robes of light, And like a young and timid bride,

Sits blushing in the arms of night:

And when the moon's sweet crescent springs In light o'er heaven's wide, waveless sea, And stars are forth like blessed things, I think of thee -I think of thee. -George D. Prentice.

THERE'S not a look, a word of thine My soul hath e'er forgot;
Thou ne'er hast bid a ringlet shine, Nor given thy locks one graceful twine, Which I remember not. -Moore.
$\mathrm{R}^{\text {OSEMARIE is for remembrance }}$
Between us day and night,
Wishing that I might always have
You present in my sight;

And when I cannot have,
(As I have said before,)
Then Çupid, with his deadly dart, Doth wound my heart full sore.

## 

Lidsa moschata. Natural. Order: Rosacea--Roso Family.


## (fyrms of hame.

$\mathrm{H}^{\text {}}$E was made all up of love and charms! Delight of every eye! when he appear'd, A secret pleasure gladden'd all who saw him. -Addison.

$\mathrm{H}^{\mathrm{E}}$ER cheek had the pale, pearly tint Of sea shells, the world's sweetest tint, as though She lived, one half might deem, on roses sopp'd In silver dew.

- Bailey.
$\lceil$ HE passion you pretend, Was only to obtain;
But when the charm is ended,
The charmer you disdain. -Dryden.

IGHT as the angel shapes that bless
An infant's dream, yet not the less
Rich in all woman's loveliness; With eyes so pure, that from their ray Dark vice would turn abash'd away.
-Moore.

TELL me where thy strength doth lie;
Where the power that charms us so -
In thy soul, or in thine eye?

THERE 'S no miniature In her face, but is a copious theme, -Waller. Which would, discours'd at large of, make a volume. -Massinger.

CHE moved upon this earth a shape of brightness,
A power that from its objects scarcely drew
One impulse of her being - in her lightness,
Most like some radiant cloud of morning dew.
-Shelly.


## 



## Titytity.

What stronger breastplate than a heart untainted?
Thrice is he armed who hath his quarrel just, And he but naked, though lock'd up in steel, Whose conscience with injustice is corrupted.
-Shakespeare.
$T$ HOUGH with tardy step
Celestial justice comes, that step is sure, Unerring is her bolt, and where it falls, Eternal will the ruin be.
-Samuel Hays.

JUSTICE, when equal scales she holds, is blind, Nor cruelty, nor mercy, change her mind: When some escape for that which others die, Mercy to those, to these is cruelty. -Denham.

AHAPPY lot be thine, and larger light Await thee there; for thou hast bound thy will In cheerful homage to the rule of right, And lowest all, and doest good for ill.

## -Bryant.

THE sun of justice may withdraw his beams Awhile from earthly ken, and sit concealed In dark recess, pavilioned round with clouds; Yet let not guilt presumptuous rear her crest,

Nor virtue droop despondent; soon these clouds, Seeming eclipse, will brighten into day, And in majestic splendor he will rise, With healing and with terror on his wings.

## 

Ruta gramodens. Natural Order: Rutacea-Rue Family.


## Singe.

Saldia officinalis. Natural Order: Labiata-Mint Family.



AGE is an humble denizen of the kitchen-garden, never making its appearance on the lawn among the gay and brilliant companions that we find it associated with in the botany, but content to be surrounded by the less obtrusive though more useful plants - the crisp lettuces, the peas, the beans, and numerous others that garnish our tables during the summer months. In order to be well grown it requires a mellow soil, when it becomes a pleasing object to the eye, its peculiar green distinguishing it from other plants, even at a distance; and behold, what a pretty leaf! so rugous or wrinkly that if transparent it would be like the meshes of fine lace. The flowers are purple, blooming in spikes. Its Latin name, is derived from salvo, I save, as it possesses valuable medical properties, being classed in botanical works as a tonic and expectorant.

## 

$\mathrm{A}^{\text {ND oh, the atmosphere of home! how bright }}$
It floats around us when we sit together
Under a bower of vine in summer weather,
Or round the hearthstone on a winter night.
-Park Benjamin.
$\mathbf{N}^{O}$ single virtue could we most commend, Whether the wife, the mother or the friend; For she was each in that supreme degree, That as no one prevail'd, so all was she.
-Dryden.

CEEK to be good, but aim not to be great; A woman's noblest station is retreat;
Her fairest virtues fly from public sight; Domestic worth - that shuns too strong a light. -Lord Lyttleton.

HE sum of all that makes a just man happy,
Consists in the well choosing of his wife.
Consists in the well choosing of his wife. -Massinger.
$A^{\text {LL day, like some sweet bird, content to sing }}$ $\mathrm{A}_{\text {In its small cage, she moveth to and fro - }}$ And ever and anon will upward spring To her sweet lips, fresh from the fount below, The murmur'd melody of pleasant thought.
-Mrs. E. Oakes Smith.

DOMESTIC happiness! thou only bliss
Of Paradise that has surviv'd the fall! Though few now taste thee unimpair'd and free, Or, tasting, long enjoy thee; too infirm, Or too incautious, to preserve thy sweets Unmix'd with drops of bitter. - Cowper.


## Sinsimparilla.

similaz salsaparilla. Natural Order: Smilacer-Smilax Family. druggists in their preparations, and is supposed to have similar properties.

## 

$T \begin{gathered}\text { HIS sad experience cites me to reveal, } \\ \text { And what I dictate is from what I feel. }\end{gathered}$
-Prior.

〇 FATE! all left behind,
I follow thee adown the bitter road, With weary feet, and heavy eyes and blind,

That leadeth to thy far unknown abode:

No need, then, with thy stings my flesh to goad, Keep them for those that strive with thee in vain, And leave me to my constant, weary pain.
-William Morris.

WORLD'S use is cold - world's love is vain -
World's cruelty is bitter bane;
But pain is not the fruit of pain. -IIrs. Browning.

0
TEACH him, while your lessons last, To judge the present by the past; Remind him of each wish pursued,

How rich it glow'd with promised good;
Remind him of each wish enjoy'd,
How soon his hopes possession cloy'd.
CXPERIENCE, join'd to common sense,
C To mortals is a providence. -Green.

## Sixssutyas,

$\mathfrak{S a g s a f r a s}$ officiuale. Natural Order: Lauracce-Laurcl Family.

-... Gnexinorn .... many others, most of which possess aromatic properties, either in their bark, roots or leaves. Many of them are in common use, as the cinnamon, obtained from the bark of the Cinnamomum Zeylanicum, a native of Ceylon; and the camphor, an aromatic gum procured from several trees in India, China and Japan. The Sassafras is found abundantly throughout the United States and Canada. The bark of the root, along with the essential oil prepared from it, is the chief article of commerce, and possesses gentle stimulating, aromatic and alterative properties. The tree grows to the height of fifteen or twenty feet, and presents a rather pleasing appearance. The pith of the young wood is sometimes used in inflammation of the eyes. The flowers are a greenish yellow, appearing from April to June.
Maumit

COR where my worthiness is poor,
My will stands richly at the door,
To pay shortcomings evermore.
-Mrs. Browning.

Tever thus when favors are denied: All had been granted but the thing we beg, And still some great unlikely substitute, Your life, your souls, your all of earthly good, Is proffer'd in the room of one small boon.

- Foanna Baillie.
$\mathrm{N}^{\mathrm{O}}$ trifle is so small as what obtains, Save that which loses favor; 'tis a breath Which hangs upon a smile! a look, a word, A frown, the air-built tower of fortune shakes, And down the unsubstantial fabric falls.

WE give of what we take
From life of outward things; our spirits leave, Where they have been, a glory in their wake More bright than they receive.
-Dora Greenwell.

GIVE thy heart's best treasures-
From fair Nature learn;
Give thy love - and ask not, Wait not a return!

And the more thou spendest From thy little store, With a double bounty, God will give you more.


## Shamuark.

Orifolium repens. Nitural Order: Leguminosa-Pulse Family.


- Tancorgors....

HITE CLOVER, as this plant is usually called, inhabits - all soils, from the luxuriant meadow to the sterile mountains, hills or rocky places. It is highly useful for pasturage, and forms the chief food for cattle in some countries. The flowers are white and odoriferous. Bees are attracted from a considerable distance by it, as it freights the air very heavily where it grows in quantities. The Shamrock is an Irish plant, and St. Patrick having chosen it to illustrate to his simple hearers his idea of the Trinity, it became thenceforth the national emblem of Ireland. Brande and Bentham say the Shamrock is the Oxalis acetosella or common wood sorrel, and with some reason, as the White Clover is believed to be of only recent introduction into Ireland, but the above is more generally received. Pliny says no serpent will touch it, which is probably a classic superstition.

## Jinght heartednest.

EACH delighted and delighting, gives
-Prior.
THOM call we gay' that honor has been long
The boast of mere pretenders to the name.
The innocent are gay - the lark is gay,


0THOU sweet lark, that in the heaven so high, Twinkling thy wings, dost sing so joyfully,
I watch thy soaring with no mean delight; And when at last I turn mine aching eye

That dries his feathers saturate with dew Beneath the rosy cloud, while yet the bean Of day-spring overshoot his humble nest. -Cozuper.

So, lost in vivid light,
So, rapt from day and might, I linger in delight,
Enraptured o'er the vision-fireighted hours.
-Rose Tery.
That lags so far below that lofty flight, Still silently receive thy melody.
O thou sweet lark, that I had wings like thee!


## Snowhall.

Diburmum rosemu. Natural Order: Caprifoliacee-Honeysuckle Family.




HIS shrub is a native of Europe, and attracts general attention in early spring, when it crowns itself with bloom. The flowers make their appearance at first in small, greenish masses, and are utterly devoid of beauty; but a few days of warm sunlight bleaches them to a creamy white, by which time the balls have expanded to their utmost, bringing full assurance that the loitering days of summer are at hand The Viburnum assumes a rather straggling shape if left entirely to itself, but with a little attention and pruning can be trained into a wellshaped bush for a single specimen, or, where the luxury of space will allow, it may be planted in groups to adorn the lawn, where it harmonizes well with the delicate and simple tints of the lilac and other spring flowers. In England it is called the Guelder Rose. The significance of its botanical name is uncertain, but it is the old Latin appellative.

## 

THE torch you turn to earth still upward lifts its flame;
And so the soul looks up, though turned to earth in shame. --Wm. W. Story.

HER thoughts were holy, saint-like, Ever pointing to her God;
And sweetest orisons were uttered
By the lips beneath the sod.

So that queenly "Snowball" blooming, Was of her an emblem given;
For its flower language whispers -
"My thoughts are all of heaven." -Lacy M. Sanford.

HEAVEN darkly works; yet where the seed hath been, There shall the fruitage, glowing, yet be seen.

> -Hemans.

M $Y$ thoughts are not in this hour
Unworthy what I see, though my dust is; Spirit! let me expire, or see them nearer!
-Byron.

CACH individual seeks a separate goal;
1 But heav'n's great view is one, and that the whole; That counterworks each folly and caprice; That disappoints th' effects of ev'ry vice. -Pope. 276


## Snomuxap drex,

ffalegia diptera. Natural Order: Styracacere-Storax Family. to twenty feet, though they are occasionally found considerably taller. In the South they bloom from March to May. The flowers, which are white and bell-shaped, make their appearance before the large and ample foliage. It is from a tropical tree of this order that the Storax and Benzoin or Gum Benjamin is obtained. This resinous sap is made to flow by perforating the bark of the stems and branches. It is very fragrant, and is much used in the manufacture of various perfumes. In medicine it is regarded as a stimulant and expectorant.

## 

WHAT then remains but well our power to use, And keep good humor still, whate'er we lose? And trust me, dear, good humor can prevail, When airs, and flights, and screams, and scolding fail; Beanties in vain their pretty eyes may roll; Charms strike the sight, but merit wins the soul.
-Pope.

CEE how the day beameth brightly before us!
Blue is the firmament, green is the earth; Grief hath no voice in the universe chorus;

Nature is ringing with music and mirth.

Lift up thy eycs, that are looking in sadness; Gaze! and, if beauty can rapture thy soul, Virtue herself shall allure thee to gladness Gladness! philosophy ${ }^{1}$ s guardian and goal. --Front the Gernan.

$$
\begin{aligned}
& \text { I'D laugh today, today is brief, } \\
& \text { I would not wait for anything; } \\
& \text { I'd use today that cannot last, } \\
& \text { Be glad today and sing. } \\
& 2788^{\text {- Christina } \text { G. Rosselti. }}
\end{aligned}
$$



## $\mathfrak{F r c e x} \mathfrak{x y}$.

Deronica arnemsig. Natural Order: Scrophulariacea-Figwort Family.


ERONICA ARVENSIS, or Field Veronica, is found chiefly in dry fields throughout the Northern and Middle States. It is a small plant, from two to six inches high, with pale green foliage, and flowers that are blue in color. There are some native species of this plant that flourish only in the black and heavy soil of wet ditches. A variety called Spiked Speedwell, a native of Europe and Asia, with beautiful blue or pink flowers, is now cultivated for the adornment of our gardens. It is supposed by some authorities that this plant was named in honor of St. Veronica. The common Speedwell is used by the poorer classes in Sweden as a substitute for tea, the true Chinese herb being probably saved for special occasions. Medicinally, it is reputed to possess properties that are sudorific, diuretic, tonic and expectorant.

## 

$$
\bigcup^{\mathrm{H}!\text { the tender ties, }} \text { Close twisted with }
$$ Close twisted with the fibers of the heart! Which broken, break them, and drain off the soul Of human joy, and make it pain to live.

-Young.

ND at last he wakened from his swoon,
And found his dear bride propping his head, And chafing his pale hands, and calling to him; And felt the warm tears falling on his face;

And said to his own heart, "She weeps for me:" And yet lay still, and feigned himself as dead, That he might prove her to the uttermost, And say to his own heart, "She weeps for me." -Tennyson.

CHE is as constant as the stars
That never vary, and more chaste than they.

> -Proctor.

SHOULD I change my allegiance for rancor, If fortune changes her side?
Or should I, like a vessel at anchor, Turn with the turn of the tide?

Lift, O lift, thou lowering sky,
An thou wilt thy gloom forego!
An thou wilt not, he and I
Need not part for drifts of snow.

- Fean Ingelow.


## Spidexprort.

IIradescantia ఏirginica. Natural Order: Commelynacea--Spiderwort Family.


AMED after John Tradescant, a favorite gardener of Charles I. of England, and after his son of the same name, both distinguished botanists and travelers, this plant is familiarly known as the Spiderwort. It is a common plant, with coarse, grasslike leaves, and pretty purple or rose-colored flowers of a delicate texture. It is almost impossible to prepare a perfect specimen for the herbarium, as the least pressure discolors and withers its petals beyond recognition. The stem when broken discovers a viscous juice, that spins out like a spider's silken thread as the parts are separated, thus giving it its common appellation. The Cleome pungens has also been sometimes called Spiderwort, or Spiderflower, but belongs to the Caper Family, and is a tall, showy, biennial plant. The flowers, which bloom in racemes, are separately rather curious in structure. The petals are mounted on threadlike claws, and extending above them, about twice their length, are the six stamens, like so many legs of a spider. Cleome, from the Greek, means something closed; and pungens, from the Latin, signifies piercing.

## 

B
UT I forgot the parting words she said,
So much they thrilled the all-attentive soul;
For one short moment human heart and head
May bear such bliss - its present is the whole;
I had that present, till in whispers fell With parting gesture her subdued farewell.

- Fean Ingelow.

BLESSED, thrice blessed days! but ah! how short!
Bless'd as the pleasing charms of holy men, But fugitive, like those, and quickly gone. O slippery state of things! What sudden turns,

What strange vicissitudes, in the first leaf Of man's sad history! today most happy; And, ere tomorrow's sun has set, most abject! How scant the space between these rast extremes! -Blair.

THE spider's most attenuated thread
Is cord - is cable - to man's tender tie
On earthly bliss; it breaks at every breeze. -roung.

## Spilienaxd.

Atalia racemosa. Natural Order: Araliacea-Ginseng Family. this plant has a pleasant, aromatic root, which is sometimes used medicinally, and as an ingredient in some manufactured beverages. It is not to be understood, however, that this is the true Spikenard (sometimes called Nard) so highly spoken of in Scripture, which is supposed to belong to India, as only an inferior kind is found in Palestine. It has an aromatic smell, and is a favorite article of perfume in Thibet and Nepaul. It is said to grow in large tufts, rising upward like grass, and forms an article of considerable traffic in Egypt and Turkey. It is from this plant that the highly-precious, odoriferous ointment is made, and a box containing a pound, in the time of our Saviour, was valued at more than three hundred pence, or denarii, a Roman coin, which, at fifteen cents each, amounted to about forty-five dollars.

## Benefits.

$\mathrm{H}^{\mathrm{E}}$E that neglects a blessing, though he want A present knowledge how to use it,

> Neglects himself. -Beanmont and Fletcher.
$A_{\text {Freely to give as freely to require; }}^{\mathrm{ND} \text { 'tis not sure so }}$ A bounteous act hath glory following it,

They cause the glory that the act desire. Is by the doer made an injury.
$T$ O brag of benefits one hath bestown, Doth make the best seem less, and most seem
-Lady Carezu. Which in itself is good - as surely brings
Reward of good, no matter what be done.
-Pollock.

MIND despatch'd upon the busy toil, Should range where Providence has bless'd the Visiting every flow'r with labor meet,
And gathering all her treasures sweet by sweet,
[soil; She should imbue the tongue with what she sips, And shed the balmy blessing on the lips, That good diffus'd may more abundant grow, And speech may praise the pow'r that bids it flow.

## Spruse

Abirs nịra. Natural Order: Coniferce-Pine Family.


PRUCE is the name applied by Linnæus to all of the species comprehended under the genus Abies, but later botanists make a somewhat different classification. Spruces, firs, pines, balsams and hemlocks are all closely allied. This variety of Spruce is an inhabitant of the northern part of the United States, where it attains the altitude of seventy and sometimes eighty feet, rearing upward a towering, pyramidal head. Some of the mountain forests in the colder latitudes are almost wholly composed of it. The trunk is straight; the wood is light, yet strong and elastic, and is employed many ways in architecture, but is not as valuable as the White Spruce. The essence is produced by boiling the tops of the Abies nigra in water, then concentrating by evaporation.

## Tartweff.

FAREWELL, then, thou loved one-O, loved but too well,
Too deeply, too blindly for language to tell!

- Charles Femno Hoffinan.

FAREWELL, my home, my home no longer now,
Witness of many a calm and happy day; And thou, fair eminence, upon whose brow

Dwells the last sunshine of the evening ray, Farewell! Mine eyes no longer shall pursue The westering sun beyond the utmost height, When slowly he forsakes the fields of light.
-Southey.
$A^{N D}$ now farewell, farewell! I dare not lengthen
These sweet moments out; to gaze on thee Is bliss indeed, yet it but serves to strengthen The love that now amounts to agony;
This is our last farewell. -Mrs. Welby.

Farewell, thou canst not teach me to forget.

〒AREWELL! I will omit no opportunity That may convey my greetings, love, to thee.

> - Shakespeare.

WITH that wringing my hand he turns away; And tho' his tears would hardly let him look, Yet such a look did through his tears make way

As show'd how sad a farewell there he took.
$T$ HEN came the parting hour, and what arise When lovers part - expressive looks, and eyes Tender and tearful - many a fond adieu, And many a call the sorrow to renew.


## Star fifonex.

## Sabbatia brachiata. Natural Order: Gentianacea-Gentian Family.

$\qquad$


F the Sabbatias (so called in honor of the Italian botanist Sabbati) there are several varieties, and although but few have found their way into cultivation, yet they deserve to be classified among our most beautiful native plants. The Star Flower, one of the species, is found quite abundantly on dry prairies in several of our Western and Southern States. The stem is about a foot high, with lance-linear leaves. The blossoms are varied in different individual plants. Sabbatia brachiata has flowers of a delicate rose-purple, with a yellow star, which is bordered with green; and Sabbatia stellaria is rose-color, the star of which is bordered with red. It is to this family that the plants belong from which the medical remedy known as gentian is obtained, the properties being both tonic and febrifugal.

## Retifratitr.

$$
\begin{aligned}
& \text { ET us love now in this our fairest youth, } \\
& \text { When love can find a full and fond return. } \\
& \text {-Percival. }
\end{aligned}
$$

 I was a happy man that day,

And happy ever after. -.Vrs. Hozvitt.
$\mathrm{B}^{\mathrm{E}}$ thine the more refined delights,
Of love, that banishes control, When the fond heart with heart unites, And soul in unison with soul.

W
HICH is that this of all men on earth Doth love me well enough to count me great-
To think my soul and his of equal girth?
O. liberal estimate!

And $y$ et it is so; he is bound to me,
For human love makes aliens near of kin;
By it I rise, there is equality;
I rise to thee, my twin. -Fean Ingelow.

WHERE heart meets heart reciprocally soft, Each other's pillow to repose divine.

## Stax of 和thlehem．

（Onuithogalum umbellatum．Natural Order：Liliacau－Lily Family．


ENTIONED by Pliny，author of a Natural History，who flourished A．D．77，the Ornithogalum has given rise to Nor much comment as to the origin of its name．It is derived from two Greek words，ornithos，a bird，and gala， milk－a most singular combination，surely；and we cannot help suggesting the following theory：The Greeks had a pretty and poetic conceit，that in spring a certain wind blew，and with it brought the birds of passage to gladden their bowers with song，and this wind they named ornithias，or bird－wind．Now the Star of Bethlehem blooms in April and May，about the time of the －birds＇return，thus poetically is seen a flower greeting the birds；a flower，too，which is of an opaque white，or milk color．The English name is from the shape of the blossom．The bulbs fre－ quently attain a great size．

## Thenantifiation．

NOR did he doubt her more，
But rested in her fealty，till he crowned
A happy life with a fair death．－Tennyson．

WHOM but Maud should I meet－ And she touched my hand with a smile so sweet She made me divine amends For a courtesy not return＇d．

ELL do vanish＇d frowns enhance The charms of every brighten＇d glance， And dearer seems each dawning smile For having lost its light awhile．－Moore．
［ WOULD have my love
Angry sometimes，to sweeten off the rest
Of her behavior．－Ben 7onson．
${ }^{66}$ AND didst thou weep，
And $I$ did not console？
Look up，and be no longer sad！＂

She called me by my name： Our spirits rushed together，glad And swift as flame to flame．
－Dora Greenzwell．

## Strambaxiy.

fragaria nesca. Natural Order: Rosacca-Rose Family.

 VER welcome to our tables, the Strawberry is one of the earliest, most abundant and best known of our fruits, and requires but little description or commentary. We have many varieties of this plant growing wild in meadows and on the hillsides throughout the United States and British America. The Alpine or English Strawberry is found chiefly in cultivation. The fruit is conical, scarlet, and fragrant, and gleams brightly amidst its triple leaves. We are indebted to this order of plants for a great variety of our fruits, namely, the peach, pear, apricot, apple and cherry, as well as the blackberry and various raspberries. The Strawberry is peculiar, in having its seeds on the outside of the fruit, instead of being surrounded by the pulp.

## Prefert Ganumest.

THY purpose firm is equal to the deed:
Who does the best his circumstance allow
Does well, acts nobly ; angels could do no more.

$$
- \text { Tomeng. }
$$

HOWE'ER it be, it seems to me 'Tis only nohle to be good;
Kind hearts are more than coronets, And simple faith than Norman blood. -Temyson.
$\lceil$ HE words which thou hast utter'd Are of thy soul a part; And the good seed thou hast scatter'd

Is springing in my heart.
-Whittier.

HE was too grood to be Where ill men were; and was best of all Amongst the rarest of good one५. -Shatenspearc.
$T$ HEN preach'd the humble Strawberry. Behold
The lowliest and least adorn'd of flowers

And fruit is there unfound in gaudier bowers.
So plain be thou and meek,
And when vain man shall seek,
Unveil the blooming fruit of solitary hours.

- Evam.

My heart
Contains of good, wise, just, the perfect shape.

- Milton.


## Sumaxh

Mhus aromatica. Natural Order: Anacardiacer-Sumach Family.

$\qquad$
NOWN familiarly as Sumach, the Rhus aromatica is a pretty shrub from two to six feet high, growing on open lands in Canada and the United States, sometimes covering acres of ground if left unmolested. The flowers are yellowish, and are rather unattractive in comparison with the berries when ripened, which look like so many crimson plumes waving in the air. They possess an acid taste, and are not poisonous. The Venetian Sumach is said by Nuttall to grow plentifully in Arkansas. The Italians use it in preparing leather. Among other species of the Sumach are the Rhus glabra, the bark of which may be used in tanning, and the berries to create a dye; the Rhus typhina, the wood of which is aromatic, and produces a yellow dye; and the Poison Sumach, the appearance of which is similar to the above, except that it is perhaps larger and inhabits swampy places. It is intensely poisonous, even to the touch, and sometimes imparts its pernicious influence to the surrounding atmosphere.

## Sphendur.

$\Gamma$ LORAL apostles! that in dewy splendor
Weep without sin and blush without a crime,
O, may I deeply learn and ne'er surrender
Your love sublime!
-Horace Smith.

THE bright sun compacts the precious stone,
Imparting radiant luster like his own;
He tinctures rubies with their rosy hue, And on the sapphire spreáds a heavenly blue.
-Sir R. Blackmore.
$\mathrm{R}^{\text {RIGHT and glorious is that revelation }}$ Writ all over this great world of ours
Making evident our own creation, In these stars of earth; these golden flowers. -Langfellow.
$A_{\text {O'er }}^{\text {ND wide a splendor streamed through all the sky; }}$
That touched the gray rocks lightly, tenderly;
A transitory flush.
-Celia Thaxter.



## Suret iflay.

## Alortis calamus. Natural Order: Aracea-Aram Family.



ARLY everywhere in low, wet soils throughout the United States, the Sweet Flag, or Calamus Root, as it is sometimes called, may be found, the grouping of its swordlike leaves adding variety to the surrounding landscape. The root is thick and branching, creeping along through the watery soil like so many reaching fingers. It is highly aromatic to the taste, and is often used medicinally as a mild stimulant and tonic, being highly spoken of by some physicians as a valuable ingredient in ague remedies. The name Acorus is thought to be derived from the Greek kore, pupil of the eye, because of supposed value as an eye-salve; and the Latin word calamus means a reed. Among the Turks, who are said to consume immense quantities of all kinds of sweetmeats, it is very popular as a confection, it being prepared by a coating of sugar.

## Tituers.

> $\bigcirc^{\mathrm{N}}$ hanging cobwebs shone the dew, And thick the wayside clovers grew; The feeding bee had much to do, So fast did honey drops exude: She sucked and murmured, and was gone, And lit on other blooms anon, The while I learned a lesson on

The source and sense of quietude.

- Fean Ingelow. ,
$A$ CLOUD lay cradled near the setting sun,
A gleain of crimson tinged its braided snow;
Long had I watched the glory moving on
O'er the still radiance of the lake below.
Tranquil its spirit seemed, and floated slow!
Even in its very motion there was rest;
While every breath of eve that chanced to blow

Wafted the traveler to the beauteous west. Emblem, methought, of the departed soul!

To whose white robe the gleam of bliss is given, And by the breath of mercy made to roll

Right onward to the golden gates of heaven, Where to the eye of faith it peaceful lies, And tells to man his glorious destinies.

## Surest iotator

Batatas edulis. Natural Order: Convolvulacece-Convolvulus Family.


TATAS, or Sweet Potato, is native to both the East and West Indies, and only within a recent period has the cultivation of the tubers been attempted save in tropical countries or the more remote, warm parts of our Southern States. Latterly, however, they have been introduced into the Middle States, where they have been successfully grown by first © starting the plants in hotbeds, and then transplanting them to the soil in which they are to grow. The potatoes are protected in dry sand during winter. The tubers we pointed, sweet and nourishing. $\#$ The stem is prostrate and creeping, producing purple or white flowers, campanulate in shape, and sometimes quite showy. For mere pleasure it can be grown in the house hy placing a tuber in a vessel partly filled with water, when it will reward the cultivator with several quite pretty and lengthy vines. If the first should decay before sprouting, it could easily be replaced until success crowned perseverance.

## 

$T \begin{gathered}\text { HOUGH gay as mirth, as curious thoughts sedate; } \\ \text { is elegance polite, as power elate: }\end{gathered}$ As elegance polite, as power elate: Profound as reason, and as justice clear; Soft as compassion, yet as truth severe. -Savage.
[ CANNOT soar into the heights you show, Nor dive among the deeps that you reveal; But it is much that high things are to know, That deep things are to feel.
$\int^{\mathrm{HE}}$ was the pride
Of her familiar sphere - the daily joy Of all who on her gracefulness might gaze, And in the light and music of her way Have a companion's portion. -Willis.
'Tis yours, not mine, to pluck out of your hreast Some human truth, whose workings recondite
Were unattired in words, and manifest, And hold it forth to light. - Faan Ingeloz:
$S^{T A N D}$ free and fast,
And judge him hy no more than what yon know Ingeniously, and by the right-laid line Of truth, he truly will all styles deserve, Of wise, good, just; a man both soul and nerve.


## Suret Tixilliam,

Miauthus barbatus. Natural Order: Caryophyllacea-Pink Family.


ALLED Dianthus, or flower of Jove, by the Greeks, the Sweet William still stands preëminent among the flowers which deck the garden. Although it be surrounded by the modern pinks and carnations, flaunting their beauty with high-sounding names, it deserves cherishing as an antique plant $\#$ as well as for its sportive variety. Many species of the Dianthus are natives of Oriental countries, and their colors are superb, attesting the warmth of the Eastern climates, where nature is brilliant in her tints. This species, sometimes familiarly called Bunch Pink, and some other varieties, are natives of Europe.

## Stratagrat.

$\mathrm{A}_{\text {I threw him off the scent, and ran with speed }}^{\text {ND mar }}$
To warn you, señor, how to take the man.
-George H. Boker.

WITH bended bow and quiver full of arrows, Hovered about the enemy, and marked The road he took, then hastened to my friends, Whom, with a troop of fifty chosen men, I met advancing. The pursuit I led,

Till we o'ertook the spoil encumbered foe.
We fought and conquered. Ere a sword was drawn An arrow from my bow had pierced their chief, Who wore that day the arms which now I wear. - fohn Hone.

THE maid shakes her head, on her lips lays her fingers, Steals up from her seat - longs to go, and yet lingers;
A frightened glance turns to her drowsy grandmother, Puts one foot on the stool, spins the wheel with the other. Lazily, easily, swings now the wheel round;
Slowly and lowly is heard now the reel's sound;
Noiseless and light to the lattice above her
The maid steps - then leaps to the arms of her lover.
Slower - and slower - and slower the wheel swings;
Lower - and lower - and lower the reel rings;
Ere the reel and the wheel stop their ringing and moving,
Through the grove the young lovers by moonlight are roving.

- Gohn Francis Wraller.



## $\underset{S}{\mathcal{S}} \mathfrak{x} \mathfrak{x} \mathfrak{y x}$

łphilaimlphus cormarius. Natural Order: Saxifragacea-Saxifrage Family.


HIS showy shrub is one of several bearing the same cognomen, the classic name of which was bestowed in honor of Ptolemæus Philadelphus, an ancient king of Egypt, and the founder of the celebrated Alexandrian library. In early summer it is a handsome object, and is an addition to any landscape when covered by the creamy-white flowers that adorn its stems and burden the air with their honeyed fragrance, the odor of which is similar to the orange blossom, whence it is sometimes called Mock-Orange. It is a native of Europe, but has been very many years naturalized in America. Cultivated on the lawn, its branches sway in graceful luxuriance; but if space is an object, it will allow itself to be trained against a wall, and withhold not its abundant bloom. Another variety, called Philadelphus grandiflorus, is very similar in appearance, but the flowers are odorless.

## Nemurg.

0H! friends regretted, scenes forever dear, Remembrance hails you with her warmest tear! Drooping she bends o'er pensive Fancy's urn, To trace the hours which never can return. -Byron.
$\mathbf{W}^{\text {E }}$ will revive those times, and in our memories
Those happier days; when at our eves our souls

Kindled their mutual fires, their equal beams Shot and return'd, till, link'd and twin'd in one, They chain'd our hearts together. -Denham.

CANNOT but remember such things were
That were most precious to me. $\quad$-Shokespeare.

UULL'D in the countless chambers of the brain, $L_{\text {Our thoughts are link'd by many a hidden chain ; }}$ Awake but one, and lo! what myriads rise! Each stamps its image as the other flies! -Rogers.

CTILL o'er these scenes my memory wakes, And fondly broods with wiser care;
Time but the impression deeper makes,
As streams their channels deeper wear.




# dhorn. 

Gratagus coccilifa. Natural Order: Rosacea-Rose Family.


ROWING usually in dense thickets on the borders of a woodland, or beside some creek or stream, may be found the various species of the Thorn, there being numerous varieties indigenous to the American continent. In height the trees or shrubs are from eight to twenty-five feet, and add much to the glory of the woods when they are covered by their abundant bloom in early summer. The flowers are white, and appear in generous clusters. The fruit, when ripe, in autumn, is mostly scarlet in color, though sometimes yellowish, and in a few individual kinds is both pleasant flavored and edible. The branches are provided with many thorns, from which the common synonym is derived. In some parts of the country the lower-growing ones are used as hedges, but not so noticeably as in England, where many fields are protected by them. $\$$ The wood is strong and durable.

## 真iffitulty

$\mathrm{B}_{\text {Live till to-morrow, will have passed away. }}^{\text {EWA }}$ the darkest day,

- Cowuper.
$A^{\text {S one who, journeying, checks the rein in haste }}$ Too wide for leaping, and too steeply faced

For climber to essay -

As such a one, being brought to sudden stand,
Doubts all his foregone path if 't were true, And turns to this and then to the other hand

As knowing not what to do. -Yean Ing.elow.

CAIN would I stop to remove from thy way Stones that have bruised me, and thorns that have grieved; Set up my errors for waymarks, to say, Here I was wounded, ensnared, or deceived.

> -Dora Greenwell.

W
HICH way? which way? - his eyes grew dim With the dizzying whirl, - which way to swim? The thunderous downshoot deafened him;

Half choked in the lashing spray:
Life is sweet, and the grave is grim,-
Which way? which way?
-Christina G. Rossetti.

## Shoxix Aprilc.

matura stramonium. Natural Order: Solanacer-Nightshade Family.

$\cdots$ -

RA is a formation from the Arabic name, and the fruit of the plant is called by botanists Thorn Apple, which should not be confounded with the berries or apples of the thorn tree. The varied properties of this order of plants are highly important, for, although the most of them are dangerously poisonous, yet they form both food and medicine for man. The fruits of the egg-plant, tomato, and the tuber of the potato, are excellent and wholesome food, while the hyoscyamus, atropa and Datura are invaluable in medicine. Every part of the Thorn Apple, or Datura, is a deadly poison. It is used in asthmatic affections, but should be administered only by a careful phrsician. The flowers, which are trumpet-shaped, are white, slightly tinged with purple. The common name is Jimson or Jamestown Weed, and as such it is found wild on the commons. There are, however, several handsome varieties for garden culture, from foreign countries, that are worthy of attention.

## Dratifut 6tarms.

I SHOLLD not like the glow were past,
Yet want it not entirely new; But bright and strong enough to last

About-suppose "week or two. -.Moore.
$\mathrm{B}^{\text {EAETTY }}$ is but a vain and doubtful good, A shining gloss that ladeth suddenly,
A flower that dies when first it 'gins to bud,
A brittle glass that ': broken presently;
A doubtful good, a gloss, a glass, a fiower,
Lost, faded, broken, dead within an hour.

- Sherkespeare.

I O! when the buds expand the leaves are green. L. Then the first opening of the flower is seen; Then come the honeyed breath and rosy smile, That with their sweets the willing sense beguile; But as we look, and love, and taste, and praise, And the froit grows, the charming fower deens. - Cralbe.

S
11E spoke, and lo! her lovelines,
Methought whe damaged with her tongue;
And every sentence made it lens,
So false they rung. - Yern Iugelour.




## Tubcxose

polianthes tuberosa. Natural Order: Amaryllidaceco-Amaryllis Family.

fragrant, and are borne on a slender stalk about three feet high, which rises from the center of the group of sword-shaped leaves at the base. The root is bulbous or tuberous (whence the common name, which, therefore, is not "tube-rose"), and blooms but once. The young offshoots bloom when two years old. The bulbs, old enough to bloom, are very cheap, and can be ordered from any seedsman. They should be started in a hotbed, and placed in the garden when all danger of frost is over. In very northern latitudes they should be retained in the pot, so as to finish their bloom in the house.

## Vułutunditity



F ACH sound, too, here to languishment inclin'd,
Lull'd the weak bosom and inducéd ease. Aerial music in the warbling wind,

At distance rising oft, by small degrees Nearer and nearer came, till o'er the trees

T
$\Gamma$ HEN stole I up, and trancédly Gazed on the Persian girl alone, Serene with argent-lidded eyes, Amorous, and lashes like to rays Of darkness, and a brow of pearl Tressed with redolent ebony

It hung, and breath'd such soul-dissolving airs, As did, alas! with soft perdition please; Entangled deep in its enchanting snares, The list'ning heart forgot all duties and all cares -Thompson.

In many a dark, delicious curl, Flowing beneath her rose-hued zone; The sweetest lady of the time, Weil worthy of the golden prime Of good Haroun Alraschid. -Tennyson.

## 

©̛ulipa Gesneriaua. Natural Order: Liliacea-Lily Family.


URICH was the birthplace, and March 26, 1516, the birthday, of the celebrated Swiss naturalist, botanist and scholar, Conrad Gesner, from whom this variety of the Tulip derives its distinctive name. It is a purely oriental flower; its texture, its depth of color, and even its shape, suggest to the mind the glories of the far-off eastern climes whence it has its birth. It is of Persian origin, and the native name, dulband, from whence its synonym in our language is derived, signifies a turban, after their own peculiar national head-dress. The Tulip was introduced into Europe by Gesner, since whose time its cultivation has received the most indefatigable attention. Under European taste, skill and care, the number of varieties has grown to over seven hundred; and the colors into which it has sported are many and magnificent. In old records it is found that in the year 1637 one hundred and twenty Tulips were sold at public auction for nine thousand guilders-equal to thirty-six hundred dollars. There is a species of wild Tulip quite common in the woods and vineyards of Germany. In Siberia the bulbs are used as food, although bitter and acrid.

## Dettaration of diunt.

HELEN, I love thee; by my life I do; I swear by that which I will lose for thee To prove him false that says I love thee not.
-Shakespeare.

I AM filled with such amaze,
So far transported with desire and love, My slippery soul flies to you while I speak. -Rochester.

DEAR art thou to me now as in that hour When first love's wave of feeling, spraylike, broke Into bright utterance, and we said we lov'd. -Bailey.

IDARE not linger near thee as a brother, I feel my burning heart would still be thine;
How could I hope my passionate thoughts to smother, When yielding all the sweetness to another

Which should be mine.
-Amelia B. Welby.

## Tussilago.

Dandosmia palmata. Natural Order: Composito-Aster Family.


N swamps or moist lowlands may be found the few plants known as Tussilago, or Coltsfoot. In the Tussilago farfara, we have the most common species. It is to be found chiefly on clayey soil in the Northern and Middle States. The flower appears singly, and is a many-rayed yellow head, borne on a scaly stalk about five or six inches high, and blossoming before the leaves make their appearance. Another variety called Tussilago by Aiton. is now known as Nardosmia, from the two Greek words, nardos, meaning spikenard, and osme, smell, which plant it resembles in its fragrance. The flowers, which appear in May, are used in the manufacture of perfumery. The leaves are coarse, large and palmate, having a fancied resemblance to a colt's foot, whence the common name. The scientific name is from the Latin tussis, a cough, because of its long-recognized value as a cough remedy. Its aromatic properties were only discovered during the present century.

## (20)

$\lceil$ HE gods grow angry with your patience! 'Tis their care, And must be yours, that guilty men escape not;
As crimes do grow, justice should rouse itself. - Fouson.

IMPARTIAL justice holds her equal scales,
Till stronger virtue doss the weight incline; If over thee thy glorious foe prevails, He now defends the cause that once was thine.
-Prior:

YOU are right, justice, and you weigh this well;
Therefore still bear the balance and the sword: And I do wish vour honors may increase, Till you do live to see a son of mine Offend you and obey you, as I did, So shall I live to speak my father's words:-

F but one virtue did adorn a king,
It would be justice; many great defects
Are vail'd thereby - whereas each virtuous thing In one who is not just, the world suspects. - Earl of Sterling.

Happy am I, that have a man so bold, That dare do justice on my proper son; And no less happy, having such a son That would deliver up his greatness so Into the hands of justice.

## Galsxixn

Dalerimu suluatica. Natural Order: Valerianacea-Valerian Family.


UST why this plant has been called Valerian - whether in honor of the Roman emperor of that name, or of some unknown Valerius, or (which is perhaps the most probable view) from the Latin valere, to be well,--seems to be uncertain. It is to be found in nearly all temperate climates. In the United States there are several indigenous varieties, found mostly in lowlands near wooded districts, or in swamps. The leaves of some are composed of several small leaflets arranged opposite each other along a central stem which is terminated by one a little superior in size, in others the foliage is entire. The flowers of the wild species are mostly purple, white or rose. The root of the Valeriana edulis is said to be cooked and eaten by the Indians. It is from the Valeriana officinalis that the extract used in medicine is obtained. It is useful chiefly in nervous affections, though possessing tonic, febrifugal and anti-spasmodic properties.

## 

## D

 EVOTED, anxious, generous, void of guile, And with her whole heart's welcome in her smile. -Mrs. Norton.THERE are some hearts like wells, green-mossed
As ever summer saw; [and deep And cool their water is - yea, cool and sweet; But you must come to draw.
They hoard not, yet they rest in calm content, And not unsought will give;
They can be quiet with their wealth unspent, So self-contained they live.

And there are some like springs, that bubbling
To follow dusty ways, [burst And run with offered cup to quench his thirst Where the tired traveler strays;
That never ask the meadows if they want
What is their joy to give;
Unasked, their lives to other life they grant, So self-bestowed they live. -Caroline Spencer.
(AN I yield you blessings? says the friendly heart;
Fear not 1 am poorer, though I much impart.
Wherefore should you thank me? giving is my need;
Love that wrought none comfort, sorrow were indeed.
-Lucy Larcom.

## Gixnuss iflytxadr.

miomad muscipula. Natural Order: Droseracea-Sundew Family.


NOWN as a denizen of warm latitudes, and consequently not often found in colder climates, except in hothouse culture, this perennial plant is rather delicate, but can be raised without difficulty if repotted each year and kept standing in a saucer of water. The leaves have a peculiar retractile power, closing whenever an insect lights on the surface, thereby holding it a prisoner within its embrace, only relaxing its hold when it has entirely withdrawn the nourishing properties from its victim. \# The flowers are white, being grouped in an umbel of from eight to ten on a stalk about a foot high. It is called Dionæa from Dione, the mother of Venus; and muscipula, from the Latin, denotes fly-gates.

## Dereil.

WE sail along a rocky shore - the cliffs are gray and green, While in the sunlit depths below as lofty cliffs are seen. We float upon the waves of Life, with Death at either hand, And what is false and what is true we may not understand.

FALSE wave of the desert, thou art less beguiling T Than false beauty over the lighted hall shed: What but the smiles that have practic'd their smiling, Or honey words measured, and reckon'd as said. - Miss Landon.

WHY, I can smile, and murder while I smile; And cry content to that which grieves my And wet my cheek with artificial tears; [heart; And frame my face to all occasions. -Shakespeare. E seem'd for dignity compos'd, and high exploit, But all was false and hollow.

YOU'RE wrong; he was the mildest mannered That ever scuttled ship or cut a throat! [man With such true breeding of a gentleman, You never could divine his real thought. -Byron.

「HEIR friendship is a lurking snare, Their honor but an idle breath;
Their smile, the smile that traitors wear;
Their love is hate, their life is death.

## Tonnsis fookingonlats.

$\mathfrak{S p e c} u l a r i a \operatorname{speculum.~Natural~Order:~Campanulacea-Bellwort~Family.~}$


OOKING-GLASSES and beauty have always been considered to have a special affinity for each other; hence this plant, the flowers of which have been likened to a "concave mirror," has been dedicated to the goddess of beauty, and called her looking-glass. It belongs to the delightful family of the Campanulas, all of which are attractive, and some very beautiful. It is a small plant about six inches high, and is a native of Southern Europe. The stem branches freely, and it is a pretty little thing for the borders of beds and walks. The flowers are blue, closing at night and opening in the morning. There is an annual variety, with white blossoms, that blooms in August.

## Thatery.

No flattery my boy! an honest man can't live by 't:
It is a little sneaking art, which knaves
Use to cajole and soften fools withal. -otway.

0THOU world, great nurse of flattery, [words, $O$ that man might hold the heart's close book, Why dost thou tip men's tongues with golden And poise their deeds with weight of heary lead, And choke the lavish tongue when it doth utter The breath of falsehood, not character'd there. That fair performance cannot follow promise?
$\bigcup^{F}$ all wild beasts, preserve me from the tyrant;
And of all tame -a flaterer. - Fonson.

IWOULD give worlds, could I believe
One-half that is profested me; Affection! could I think it thee, When flattery has caressed me? -Miss Landon.

PRAISE too dearly lov'd, or warmly sought,
Enfeebles all internal strength of thought;
And the weak soul within itself unblest Leans for all pleasure on another's brcast.
-Goldsmith.
PERNICIOUS flatt'ry! thy malignant seeds,
In an ill hour and by a fatal hand Sadly diffused o'er virtue's gleby land, With rising pride amidst the corn appear, And choke the hopes and harvest of the year.

## quxtremi.

Derbena Aubletia. Natural Order: Verbenacca-Veraiain Family.



ROUGHT into general circulation but a few years since, this beautiful flower is unsurpassed for splendor of color. It is a native of the South, and is a delicate, trailing plant, blooming freely. A few plants will cover a large bed if their branches are pinned down so that they can root at the joints, which they do readily. \# Among the Romans, the Verbenæ, do whence the name of this plant, were sacred boughs, whether of the laurel, olive or myrtle. This particular variety has been designated Aubletia in honor of the French botanist, John Baptist Christopher Fusee Aublet, who flourished in the middle of the last century, dying in 1778.

## Sensifititry.

SHE smiled; but he could see arise Her soul from far adown her eyes, Prepared as if for sacrifice.
-Mrs. Brozuning.

YET what is wit, and what the poet's art?
Can genius shield the vulnerable heart? Ah! no. Where bright imagination reigns, The fine-wrought spirit feels acuter pains; Where glow exalted sense and taste refin'd,

There keener anguish rankles in the mind; There feeling is diffus'd through every part, Thrills in each nerve, and lives in all the heart; And those whose gen'rous souls each tear would kecp From others' eyes, are born themselves to weep.
-Hamal More.

A
KINDLY speech; a cordial voice;
A smile so quick, so warm, so bright, It speaks a nature full of light.

$$
\text { -Kate } \mathfrak{7} \text {. Hill. }
$$

DEARLY bought, the hidden treasure Finer feelings can bestow!
Chords that vibrate sweetest pleasure, Thrill the deepest notes of woe. -Burns.

SHE gazed, and in the tender flush
That made her face like roses blown, And in the radiance and the hush, Her thought was shown. -F̌ean Ingelow.

NEW creation-bloom that rounds
The old creation, and expounds
His Beautiful in tuneful sounds. -MFrs. Browning.

## gixalet.

Diola odorata. Natural Order: Violacea-Violet Family.


ANY and various are the Violet species, which are natives of all lands within the temperate zone. Some of them may be found in the fields and woods during spring and early summer, with their delicate little flowers hidden amid their clustered leaves. The Viola odorata is a European Violet. The flowers, though small, are redolent with perfume, and for this quality the plant has been styled odorata (odorous), and is to be found in general cultivation abroad. Another Violet (the Viola tricolor), more frequently called Pansy, or Heartsease, we are very familiar with, and through our admiration F. give it a warm place in our hearts and a cool place in our borders. What magnificence in color! what gorgeous velvet can surpass the bloom of these modest little flowers, lying so close upon Nature's bosom? Says Shakespeare:
"Her looks do argue her replete with modesty."
IN the modesty of fearful duty,
I read as much as from the rattling tongue
Of saucy and audacious eloquence. -Shakespeare.
$B^{\text {EAUTIFUL are you in your lowliness: }}$
Bright in your hues, delicious in your scent; Lovely your modest blossoms, downward bent, As shrinking from your gaze, yet prompt to bless

The passer-by with fragrance, and express How gracefully, though mutely eloquent, Are unobtrusive worth and meek content, Rejoicing in their own obscure recess. -Barton.

凹 $\begin{aligned} & \text { E saw her charming, but he saw not half } \\ & \text { The charms her downcast modesty conceal'd. }\end{aligned}$
-Thompson.

THE violet droops its soft and bashful brow, But from its heart, sweet incense fills the air:
So rich within - so pure without - art thou, With modest mien and soul of virtue rare.
-Mrs. Osgrood.
312

V ODESTY'S the charm
That coldest hearts can quickest warm; Which all our best affections gains, And, gaining, ever still retans.

## Tixgixy fillumx,

Clematis Dirginiana. Natural Order: Ramunculacea-Crowfoot Family.


HERE are many species of the Clematis or Virgin's Bower, the most of which are grown as coverings to arbors and trellises. The name comes from the Greek word klema, signifying a vine or climbing plant. Loudon calls Clematis vitalba, very common in England and France, with its white flowers blooming in August, the Traveler's Joy. Our native species are found.wild in the Southern States, clambering over fences and bushes in the most unrestrained manner. Many of them would do admirably well if transplanted to the garden, where they would adorn some otherwise neglected nook. $\#$ There are several adapted for greenhouse culture, nearly all of them being from warm or tropical climates. The flowers of the varied kinds are white, yellow and purple. They are all worthy of attention.

## Tifitial 月ffrtiont.

THOSE tones of dear delight, The morning welcome, and the sweet good night! -Charles Sprague.
$\Theta^{\mathrm{H} \text { : sweet are the tones of affection sincere, }}$ When they come from the depth of the heart; And sweet are the words that banish each care, And bid sorrow forever depart!

'TWERE sweet to kiss thy tears away, If tears those eyes must know; But sweeter still to hear thee say,

Thon never hadst them flow.
-Miss L. E.'Landon.
> 'TWAS the earliest link in love's warm chain'Tis the only one that will long remain: And as year by year, and day by day,

Some friend still trusted drops away, Mother! dear mother! oh! dost thon see How the shortened chain brings me nearer thee? -Hillis.

## Gatimilanex.

(1)heiranthus cheiri. Natural Order: Crucifcra-Mustard Family.
C.Crextrons

ALLFLOWER is a low, semi-shrubby, perennial plant, growwo ing from one to two and a half feet in height, and comes from the south of Europe. It is a great favorite on that continent among all classes. Robert Herrick, an English poet of the seventeenth century, has a pretty little poetical legend, to the effect that a young girl much in love, but restrained of her liberty, desired to fly to the arms of her lover, for which purpose she clambered out on a high wall, to which she had tied a silken sash or rope. In descending, the knot untied, and she fell, "bruised, and bleeding, and died;" and Love, in pity, changed her to this plant, to be called forever the "Flower of the Wall." \# It does not bloom until the second year from seed, and in northern climates should be removed to a light cellar for protection from frost in winter. Cheiri is the Arabic name, and Cheiranthus a formation therefrom by adding the Greek word anthos, a flower.

## Timefity in Misfurlury.

0H! if there be an elysium on earth, it is this: When two that are linked in one heavenly tie, Love on through all ills, and love on till they die. -Moore.

VE wallfowers, shed your tints of golden dye, With fascination to the heart address'd, On which the morning sunbeams love to rest-
On which, when glory fills the glowing west,
The parting splendors of the day's decline,
So tender and beautifully shine,
An if reluctant still to leave that hoary shrine. -Evians.

CERTAIN my resolution is to die;
How can I live without thee, how forego
Thy sweet converse and love, so dearly join'd?

## - Milton.

$\mathbf{R}^{I C H}$ is the pink, the lily gay,
The rose is summer's guest;
Bland are thy charms when these decay, Of flowers, first, last, and best!

There may be gaudier on the hower, And statelier on the tree;
But wallflower, loved wallflower, Thou art the flower for me. -Moir.

## oualnut.



Inglans migra. Natural Order: Guglandacea-Waluut Family.

EUS PATER (Father Zeus), through the first syllable of the Latin equivalent Jupiter, enters into the formation of the botanical name of this valuable tree, Juglans meaning Jove's acorn; and the walnut is certainly not unworthy of the distinction. In growth it is a majestic forest tree, rising very frequently to the height of eighty feet, and is always a pleasing object to the eye. The wood of the Black Walnut is very extensively used in cabinet work and in building. It is very close grained and heavy, and when freshly sawed it is of a deep violet color. It takes a very good polish, and assumes a brownish tone after being dressed, and looks not incongruous either when upholstered in the richest of fabrics or placed amid the commonest surroundings. The nuts are of a rather flattened globose shape, and the removal of the outward husk exposes the inner shell, which is very rough on the surface.

## Suteffert.

FORERUN thy peers, thy time, and let
Thy feet, milleniums hence, be set In midst of knowledge dreamed not yet.

> - Tènnyson.

RETIR'D thoughts enjoy their own delights,
As beauty doth in self-beholding eye; Man's mind a mirror is of heavenly sights, A brief wherein all miracles scumm'd lie, Of fairest forms and sweetest shapes the store,

TE mind of man is this world's true dimension; And knowledge is the measure of the mind: And as the mind in her vast comprehension Contains more worlds than all the world can find, So knowledge doth itself far more extend
-Southrvell.
-Lord Brooke.
$A_{\text {Gird on thy blazing arms of intellect! }}^{\text {RISE, my drowsing soul! }}$
One struggle more to master coming time;
And if thy earthly walls then fall consumed, We'll scale those heights where conquering time is not.
-George H. Boker.


## (axcering daillow.

Salie Babglonica. Natural Order: Salicacea-Willow Family.

${ }_{2} \mathrm{OT}$ unlike a mass of fringe, it might be fancied, is a clump of Willows as seen against the sky, the small pointed foliage and slender twigs producing that hazy, indistinct effect. It is a pleasing tree either when single or in groups, often indulging in strange and grotesque contortions in its trunk and branches, which are most agreeable to an artist's eye, especially when surrounded by trees of more prim and dignified bearing. Nearly all the varieties have an affinity for locations near streams and ponds, or for low, wet meadow-lands, where they flourish in the abundant moisture. $\#$ They do not disdain, however, to grow in other and dryer localities, as the many promising shade trees will testify. Being easily propagated, it is probably one of the most desirable trees for speedy growth. The Weeping Willow differs from the common species merely in having long, pendulous branches, from mentioned in Psalm cxxxvii., that hung their harps upon the Willows and wept by the waters of Babylon.

## 

$A^{S}$ the drain'd fountain, fill'd with autumn leaves, So wastes at noon the promise of our dawn, The springs all choking, and the harvest gone.

> -O.W. Holmes.

COME, rouse thee, dearest! 'tis not well
To let the spirit brood
Thus darkly o'er the cares that swell
Life's current to a flood.
As brooks and torrents, rivers, all

BUT hail! thou goddess, sage and holy! Hail! divinest melancholy !
Whose saintly visage is too bright

Increase the gulf in which they fall,
Such thoughts, by gathering up the rills
Of lesser griefs, spread real ills;
And with their gloomy shades conceal
The landmarks Hope would else reveal. --Mrs. Dinnies.

To hit the scnsc of human sight,
And therefore to our weaker view, O'erlaid with black, staid wisdom's hue.
-Milton.


## daluite dadant.

Inglans cillerea. Natural Order: Fuglandacue-W'alnut Family.

$\qquad$
CVERYWHERE throughout our country, but more especially in the Northern and Middle States, the White Walnut, perhaps more commonly known as the Butternut, is to be found. The former is the more proper designation, as it belongs among the true Walnuts. The trunk is usually rather short, but large in girth. The branches spread horizontally, giving it a large, rounded head, sometimes thirty or forty feet high. The foliage has a plumy appearance, each leaf being composed of several leaflets arranged in pairs along a stem, with a single one to terminate the point. The nut is elongated in shape, and encased in a husk or sheath that is inseparable from it, and in that respect differing from other Walnuts. The kernel is very sweet, pleasant-flavored, and rich in oil, which gives it its most familiar synonym. The wood is useful in some of the arts. The bark is used in medicine as a cathartic, and by dyers to produce a brown dye.

## Quiderstanding.

YET I doubt not through the ages one increasing purpose runs,
And the thoughts of men are widened with the process of the suns.
-Tennyson.

TINE has small pow'r O'er features the mind molds. Roses, where Breathes, it is said, around whose altar-stone They once have bloom'd, a fragrance leave behind; His flower the votary has ceased to twine:And harmony will linger on the wind; Types of the beauty that, when youth is gone, [cline. And suns continue to light up the air,

Breathes from the soul whose brightness mocks de-- George Hill.

WITH mind her mantling cheek must glow,
Her voice, her beaming eye, must show
An all-inspiring soul.

MIND, despatch'd upon the busy toil, [soil; She should imbue the tongue with what she sips, Should range where Providence has blessed the

Visiting every flow'r with labor meet,
And gathering all her treasures swect by sweet,

And shed the balmy blessings on the lips, That good diffused may more abundant grow, And speech may praise the pow'r that bids it flow.

## Tuxintex Chexxy.

Phgsalis 2llikfengi. Natural Order: Solanacea-Nightshade Family.

## 

 the third is sufficiently apparent. The berry is surrounded by a bladder-like calyx, which hides as well as protects it, whence the name Physalis, from the Greek, denoting a bladder.
## 置和eftion.

YOU vow, and swear, and super-praise my parts,
When I am sure you hate me in your hearts.

- Shakespeare.
$A^{\mathrm{H} \text { ! many hearts have changed since we two parted, }}$ rill we have almost deem'd that the true-hearted Abided only with the faithful dead.

Have turn'd and stung us to the bosom's core; And life hath seem'd but as a vain deceiving, From which we turn aside, heart-sick and sore. -Mrs. C. M. Chandler.

$$
\begin{aligned}
& A^{\mathrm{N} \text { open foe may prove a curse, }} \\
& \text { But a pretended friend is worse. } \\
& - \text { Gay. }
\end{aligned}
$$

WHAT man so wise, what earthly wit so ware, As to descry the crafty, cunning train By which deceit doth mask in visor fair,

And cast her colors, dyed deep in grain,

To seenn like truth, whose shape she well can feign, And fitting gestures to her purpose frame, The guiltless man with guile to entertain?
-Spenser.

## 

famamelis bitginiaua. Natural Order: Hamamelacea-Witch Hazel Family.


ANADA and various parts of the United States produce this large shrub about as commonly as Virginia, from which it derives its distinctive qualification; its name, the Greek appellative of the medlar, has been misapplied by a mistake which it is now hard to rectify. The small branches were formerly used to discover veins of water and precious metals; and there are those who have inherited sufficient superstition to still have faith in their efficiency. We have seen wells said to have been so located, but how an unconscious piece of hazel should be more wise than man, is more than can be divined. A recent theory is, that it may be through some law of electricity not yet understood. The mode of procedure is in this manner: A branch that is forked is held, one branch in each hand, the main end pointing upward; the moment that it passes over water, it turns around and points to the earth. It is said, however, not to turn in the hands of everyone.

## 

I HAVE led a life too stirring for those vague beliefs
That superstition builds in solitude. -Miss Laudon.

0
UR witches are no longer old And wrinkled beldames, Satan-sold,
But young and gay and laughing creatures, With the heart's sunshine on their features; Their sorcery - the light which dances

When the raised lid unvails its glances, And the low-breathed and gentle tone Faintly responding unto ours, Soft, dreamlike as a fairy's moan, Above its nightly closing flowers. -Whittier.

WHAT are these, so wither'd and so wild in their attire, . That look not like the inhabitants o' the earth, And yet are on 't?

RUT the witch-hazel's flower
Of golden velvet, opening when the storm
Comes on the wings of winter to deform, [hour. Charms with contrasting bloom while ruin rules the -Alfred B. Street.

- Shakespeare.

I KNOW-whereon the sirens sit-
1 An island in a dark-green sea. Oft at the wind's own will past it

I sail my boat delightedly.

- Fames Maurice Thompson.


## Hotaxmyudot.

Altemisia absinthium. Natural Order: Composita-Aster Family.


RTEMISIA (so called in honor of the goddess Artemis, the Greek equivalent of the Roman Diana), or, in our vernacular, Wormwood, is an intensely bitter plant, and has very powerful medicinal properties. Its flowers are yellow, and it is to some extent naturalized in the mountainous districts of our Northern States. Columella, the Latin writer on agriculture of the first century of our era, mentions both the plant and absinthites, or Wormwood wine; and the celebrated Greek medical and botanical writer, Dioscorides, also speaks of it perhaps a century later. The Roman Wormwood is the kind usually found in our gardens, and is a native of Austria and other parts of Europe.

## 

$Y^{E}$ E flowers that droop, forsaken by the spring; Ye birds that, left by summer, cease to sing;
Ye trees that fade when autumn heats remove:
Say, is not absence death to those who love? -Pope.

IKE as the culver on the bared bough,
Sits mourning for the absence of her mate, And in her songs sends many a wishful vow

For his return that seems to linger late:

So I, alone now left, disconsolate, Mourn to myself the absence of my love; And, wandering here and there all desolate, [dove. Seek, with my plaints, to match that mournful - Spenser.

CHORT absence hurt him more,
And made his wound far greater than before;
Absence not long enough to ront out quite
All love, increases love at second sight.
-Thomas May.
$\bigcap^{\mathrm{H}}$ Absence! by thy stern decree
How many a heart, once light and free,
Is fill'd with doubts and fears!
Thy days like tedious weeks do seem,
Thy weeks slow-moving months we deem,
Thy months long-lingering years.
-7. T. Watson.

WHAT tender strains of passion can impart The pangs of absence to an amorous heart?
Far, far too faint the powers of language prove Language, that slow interpreter of love!
Souls paired like ours, like ours to union wrought, Converse by silent sympathy of thought.



## 7135xa.

## Duma filamentoga. Natural Order: Liliaceo-Lily Family.



AR-GRASS is a common synonym for Yucca, the aboriginal name of this plant, which compares not unfavorably with the Aloe among foliage plants. The leaves are stiff and sharp-pointed, forming a mass some two or three feet broad, and even more in old plants. There are six or seven species or individual plants, differing somewhat in their style of do foliage, yet with a strong similarity noticeable in them all. They do not bloom until quite large, when a tall stem rises from the center, from three to four feet high, sometimes producing from "two to four hundred bell-shaped florets." All the species are natives of the Southern States, and each and all make a fine and imposing appearance in the garden or on the lawn. The Yucca filamentosa has long threads trailing from the margins of the sharp-pointed leaves, whence it is sometimes called Adam and Eve's Needle and Thread.

## Authority



MAN in authority is but as A candle in the wind, sooner wasted Or blown out than under a bushel.
-Beaumont and Fletcher.

NOT from gray hairs authority doth flow,
Nor from bald heads, nor from a wrinkled brow; But our past life, when virtuously spent, Must to our age those happy fruits present. -Denham.

HENCEFORTH in my name
Take courage, O thou woman! man, take hope! Your graves shall be as smooth as Eden's sward, Beneath the steps of your prospective thoughts; And one step past them, a new Eden gate Shall open on a hinge of harmony,

HE doth not nicely prank
In clinquant pomp, as some of meanest rank, But armed in steel; that bright habiliment Is his rich valor's sole rich ornament.
-- Joshua Sylvester.
And let you through to mercy. Ye shall fall
No more, within that Eden, nor pass out
Any more from it. Live and love,-
Doing both nobly, because lowlily!
Live and work, -strongly, because patiently !
-Mrs. Browning.



## PARTII.

## Cultivation and Analysis of Plants.





Plpartiral IKloriculfure.

HE hand that made such bountiful provision for the body, was not unmindful of the æsthetical cravings of the higher nature of man, so He hath filled the air with bird-music for the delight of the ear, and hath planted the fields and hung the boughs with blossoms that paint themselves in a multiplicity of hues for the gratification of the eye. The two latter we gather around us in our homes, and the songsters sing their sweetest strains regardless of the prison bars, while the flowers, during their short lives, yield both beauty and fragrance from their fragile bells as a reward to the hand that careth for and cherisheth them. All the world love flowers, and are all the better for that love, for the soul is refreshed while the eye is pleased with their contemplation. Children delight in them; by them young men and maidens interchange compliments; and to the aged they speak of a beautiful home beyond the tomb. The wealthy pride themselves on their conservatories and flower-bedecked lawns; people in the middle walks of life like to have a few in their windows or on a stand devoted to the purpose; and even the dingy cottages of the poor are not infrequently adorned with at least a single plant, often the only link apparently that binds the inmates to the beautiful.

Having devoted a very considerable space to the Language and Poetry of Flowers, the author has thought that some practical information, drawn mainly from her own experience, in relation to the care and cultivation of plants, would prove a useful addition to the work. For however one may admire flowers, through a mere natural impulse or instinct, the cultivation of them requires taste, tact, patience and much painstaking attention. And even these qualities, to be only measurably successful, demand a solid substructure of information in regard to the wants, peculiarities and habits of plants. It will, however, be remembered by every thoughtful reader that there are but few things in this world worth knowing that do not require much patient atten-
tion; and the amateur culturist must therefore not be discouraged. Few studies will better repay one than floriculture, in the charms of the gentle, peaceful influence which it throws around the human soul. In the language of the poet Wordsworth,

> He is happiest who hath power
> To gather wisdom from a flower, And wake his heart in every hour To pleasant gratitude.

Leaving poetry and the fascinations of flowers, we now propose to descend to the more material and coarser elements that underlie the growth of plants; and "to begin with the beginning," or where the flowers begin, it becomes our duty to unfold what is required, in the way of soil, water, etc., for the practical culture of flowers.
SOILS.
IRST comes Loam, which plays so important a part in all vegeta-
tion, and which is described as a mixture of sand, clay and carbonate
of lime, with the oxide of iron, magnesia and various salts, also decayed
vegetable and animal matter. It varies in different localities in regard
to depth as well as quality. In some places it is brown, and in others
nearly or quite black, particularly in the West, where in the bottom lands
of the Missouri it is sometimes found more than thirty feet deep, as
wells of that depth have failed to reach its bottom. If it is stiff and heavy,
the clay predominates; in which case for flower-beds, and indeed for farming pur-
poses also, it would be improved if a moderate proportion of sand or stable-
manure were well worked through it to make it more porous and, as gardeners
say, warmer; for, if the soil is too cold and retentive of water, plants do not thrive.
Sand is a very useful material in plant-growing, especially in greenhouse and window
culture; and, while it contains no nutriment, it is sometimes used to grow some kinds of
bulbs, to start slips, and, as has been said, to make soil more porous. Its uses are to make
lighter the soil with which it is mixed, so that the delicate roots can feel their way through
it; to draw the heat from the atmosphere; and to act as drainage, so that the soil will not
sour. Silver sand is the most recommended, as it is a little coarser and sharper, as well
as cleaner; but as this is only found in certain localities, other or common sand can be
used as a substitute. It should be rather coarse, and from the surface when possible, if
for immediate use, as it will then have been improved by the action of the air. It is also
benefited by washing, which can be done by putting a quantity in a tub, pouring water
upon it, stirring with a stick, and then pouring off the water. The admixture with loam is
sometimes one part sand to three or five of the other, according to the plants grown.
Leaf-Mold is one of the most delightful soils for many plants, and it is very highly
prized by all who occupy themselves with their cultivation. Leaves are frequently gath-
ered into pits after they fall by the action of frost, and left until they decay; but the mold is found more abundantly in the woods, particularly in hollows where the winter's wind has drifted the leaves, and where they lie in the damp and perish. Only think of gathering into a flower-pot, to nourish a new plant, what has been the shade of perhaps a hundred years, with all its vanished glories of crimson and gold!

Turf, or grass-sods, is another article much recommended for potting plants, and should be cut about three inches thick. This of course must have time given it to rot before it is fit for use. Spring or summer is the best time for cutting, when the grass is growing, as there is more nutriment in it. The sods should be packed in a heap, the grassy surfaces toward each other. In this state fermentation commences, and the vegetable portions decay. When this process begins, the heap should be turned and stirred repeatedly with a fork, until it finally becomes a pulverized or crumbled mass. It may then be mixed with about an equal proportion of manure and of leaf-mold, when it is fit for growing most kinds of plants.

Peat is a soil of vegetable origin, found mostly in low lands, especially in swamps or what are known as bogs. It is a black mold consisting of roots, wood and kindred substances in an entirely decomposed condition, or undergoing the process of decay, and is more or less saturated with water. Some few plants, like the Venus's Flytrap, Pitcher Plant, Heath, and many varieties of Ferns and young Azaleas, require this soil in its normal condition or slightly mixed with sand; or, what is still better, as well as more definite, a soil composed of four parts peat, two of sand, one of garden-loam, and one of leaf-mold. In the greenhouse and hothouse it is mixed in smaller proportions for numerous plants.

## MANURES.

Manure should be entirely decomposed, and from two to three years old, and if still older it will be all the better. Cow-manure is far superior for most uses, as it is.finer and a more gentle stimulant. The coarser manure from the stables answers well for covering flower-beds in fall and putting around shrubs to keep them from frost, roses rejoicing particularly in its great strength. In using any solid manure for the stimulation of plant growth, especial care should be taken to incorporate it thoroughly with the various other elements of the prepared soil. Manure-water is prepared by placing the manure in a tub or other vessel and pouring boiling water thereon. After letting it stand until it cools, it can be drawn off for use, reducing its strength by the admixture of two parts pure water to one of manure-water; it is better to apply it "weak and often." Manure-water, or liquid manure, may be made from most of the domestic manures or cattle-droppings, as well as from guano, phosphate of lime, etc. Sheep-droppings also produce excellent liquid manure for many plants.

It may seem troublesome to think of using so many ingredients for the cultivation of flowers, but they are necessary to form the different requisites for various plants if one proposes to keep many. Country amateurs can find most of them close at hand; and persons living in the city, if they keep only a few plants, will find it more convenient to go to some florist and purchase a sufficient quantity already prepared, always naming the plants they wish to raise. The florist's experience is of great value to the amateur.

## $F L O W E R-B E D S$.

ONSIDERABLE care should be exercised in the preparation of flower-beds, after which they will give less trouble, and will last for many years with a little addition of manure every fall or spring. They may be various in shape - either round, triangular, palm-leaf or stars-or several of one shape with grass or paths between, grouped or massed together. They should be dug to the depth of at least a foot, and deeper if the natural soil is stiff or heavy. If the soil is poor, it would be advisable to remove it entirely and supply its place with better. If the drainage is bad-a wet soil, for instance - the surface earth that has been loosened for the bed should be thrown aside, and two or three inches of gravel, coal cinders or what is still better, some long straw manure or brush, be placed in the bottom, the soil thrown in again, manured if necessary, the lumps well beaten out, and the bed raked fine and even. After this it will require only to be well stirred with a digging-fork every spring to loosen it up a little. It is better in low situations that the beds should lie a little above the surrounding surface; but in high, dry lawns exposed to the wind, it is well to have them a little lower, the edges being trimmed as frequently as may be required; or, if surrounded by gravel walks, a border of close-cnt grass is very neat as marking the outlines of the bed. In some parts of California flowerbeds are well rolled down, to pack the surface, so as to give off less evaporation during the months of drouth. The terra cotta manufactured for the purpose, as well as tiles, bricks standing on end and touching sides, or thin, flat stones set in the same manner, are sometimes used to preserve beds from the encroachments of grass.

## FLOWER-BEDS IN RELATION TO SYMMETRY AND COLOR.

In arranging flower-beds, some attention should be paid to the effect different plants will produce when brought together. The taller ones should go to the center, and the lower growing and prostrate ones toward the margins, so that one will not hide another. The same rule applies to straight borders of walks, the taller ones going back against the grass. This is usually easy to do, as in most cases the heights of plants are given on seed packets. For a fine display, too much forethought cannot be given to the various colors that are to be brought in contact, as some colors, though handsome in themselves, utterly destroy the beauty of each other. For instance, scarlet and purple and some shades of blue do not affiliate at all, and are what are called antagonistic colors. We will fill an imaginary bed with Verbenas of inharmonious tints if put together wrongfully, but very pleasing and harmonious if rightly placed. Our stock consists_of a dozen plants each of scarlet, purple, pink or rose color, and white. Placing the scarlet at one angle of the bed, we arrange next to it the pure white, that harmonizes everything in color and reconciles natural antagonism; adjoining it we plant our purples, and then our rose-tint-and how happily the two latter combine! The pale tints of all colors are more easy of assimilation than the deep ones, but what richness and depth of tone there is in some of the darker ones! For display-beds cut in the lawn or grass-plats, masses of one color for each bed, or at most two complementary colors, produce the finest effect.

In order to determine in a ready and simple way which colors will he best alongside of each other, either in beds of flowers or in bouquets, place a sheet of white paper so that the eye can be suddenly cast upon it; then gaze steadily upon the flower or leaves that it may be wished to plant or arrange so as to harmonize or form a good juxtaposition; after gazing two or three minutes, suddenly cast the eye on the white paper, and the color will be seen that will be best to place near whatever has been looked at.

DEFORMITIES CONCEALED.
About many neat and even handsome homes there are oftentimes dilapidated buildings, sheds or fences that may be hidden out of sight and transformed into things of beauty, at least during the summer season, by the use of some perennial climbing plants. The Ampelopsis quinquefolia, Celastrus scandens, Clematis virginiana, Tecoma radicans and others of the same character (see Climbing Plants, p. 393), will serve this purpose.

Many of the annual climbers can also be used to good advantage. The Echinocystis lobata, or Wild Cucumber, is a rapid and luxuriant grower, and has the further advantage, not common among climbers, of long racemes of sweet-scented flowers. A singleplant will sometimes cover a good-sized building in a season. The Ricinus communis, or Castor-oil Plant, though not a climber, is often used for this purpose in ornamental grounds, its large and abundant peltate foliage forming an excellent screen. The Helianthus annuus, or common Sunflower, and the allied species; Helianthus tuberosus, or Jerusalem Artichoke, will also serve the same usefnl purpose in an effective manner.


* $\mathscr{P}$ ROPAGATING $\mathscr{P L} A N T S$.

ATURALLY some amateur culturists will have occasion to use one or more of the simpler methods of propagating plants, which are on that account here subjoined.

## SOWING SEEDS.

In sowing seeds, some thought should be had for their size and construction. Small ones, as the Portulaca and Petunia, it is quite sufficient to scatter on the ground, and, rubbing the hand gently over the surface, mix them with the soil. For others it is well to mix them with some finely pulverized earth, and sow both together. Larger seeds, like Sweet Peas, Four-o'clocks, Beans, and various others, require planting, a process which is different from sowing, inasmuch as the seeds are placed in the earth, in proportion to their size, from one to two or more inches apart; and none should be embedded deeper than five times its own diameter. The outer or whitish shell of the Nasturtium, and of some others that have a double shell, should he removed with the thumb-nail or a knife. Some flat seeds, like the Cobæa, should be put in the ground edgewise, to prevent decay. The cottony substance around the Globe Amaranth seeds should be picked off for the same reason. Very hard seeds,
like the Acacia and Sweet Peas, should be soaked in hot water, as also the Cypress Vine and Verbena seeds. Verbena seed should be pushed lengthwise into the soil, a little more than its own length. Evening or just before a shower is the best time for sowing seed; a heavy rain would be apt to wash small ones away. As soon as the seeds are sown, a piece of old carpet or other heavy cloth spread over them, secured from blowing away, is a necessity for successful raising, to insure uniform temperature and moisture; and this covering should be retained until the seeds have sprouted. After the plants are up, or when the carpet is removed, they must be shaded with thin muslin or white paper. They ${ }^{-}$ should be sprinkled with a watering-pot that has a fine rose-spout, or, in the absence of such an article, a small clothes-broom dipped in water answers the purpose very well.

As some small seeds produce plants disproportionately large - as, for instance, Mignonette, Sweet Alyssum, Petunia, Portulaca and numberless others- they should be thinned out as soon as the plants are sufficiently established, leaving always the best. If it is desired to transplant any of them to another place, it will be well if some earth be taken up with them. Certain plants transplant badly, and should be sown where they are to grow; and we believe that where such directions are found on seed packets, it is an indication of their delicacy on that point.

## CUTTINGS OR SLIPS.

Slips or cuttings, as the latter name indicates, are pieces cut from the branches of growing plants, and should rarely have less than three joints. The old and careful manner of cutting immediately under a joint, is the best, though many plants will succeed where this precaution is neglected. The leaves adhering to the joints are generally shortened, that is, cut short, to save unnecessary waste of vital force. Cuttings may be inserted in clean, coarse sand, powdered eharcoal, coarse brickdust, or clear sawdust, and in pots, boxes or beds, in or out of doors in summer, but within doors only and in a warm, moist atmosphere, in winter.

Some cuttings, as most of the Geranium Family, as well as the fleshy and succulent plants, as the Cactuses, will strike readily in almost anything out of doors, from May to September. Soft-wooded cuttings of Oleander will strike in bottles of water; and similar cuttings of Verbenas, Heliotropes, Petunias and many others, will take root in dishes of sand and water, care being taken not to allow the sand to become entirely dry.

Rose cuttings should be made of shoots that are about half ripe, that is, half way between soft vegetable matter and hard wood, cut into lengths of three joints or leaves, entirely removing the lower leaf. An even temperature and a warm, moist situation are demanded by rose cuttings, while careful shading from excessive heat is equally indispensable. Leaves of Begonias, Hoyas and some other plants, will strike root and form new growths if rightly cared for.

In transplanting cuttings after they have rooted, the particles of matter that adhere to the rootlets should be flirted, filliped or washed off before placing them in their new homes.

## LAYERING.

As a rule this process of propagation is mostly had recourse to early in August, and is accomplished thus: A shoot of the current year's growth should be taken and cut about
half through near a joint, when it should be laid down in the soil and covered over with moss, manure or other substance that will retain moisture around the incision; and the head or end of the shoot should be left uncovered. Many ornamental shrubs, such as Snowballs, Tree Cranberries and the like, can be raised only in this manner or from seeds.

## OFFSHOOTS.

These form a natural kind of layering, where the plant sends forth a horizontal, underground stem or shoot, which needs but to be cut off from the parent stem at the proper season, to constitute an entirely distinct plant. They are nearly similar in character and appearance to the familiar above-ground runners of the strawberry and many other like plants.

## B ULBS.

Bulbs are mostly increased by offsets or bulblets formed on the sides of the previous growth, and generally require two or more years before they bloom. All bulbs require a peculiarly rich, deep soil, and plenty of liquid manure while in a growing state. They are best kept in a bed or box by themselves to facilitate the extra attention necessary to develop a strong, healthy growth.

$\mathscr{P O T T I N G \mathscr { P } \mathcal { P } A N T S . ~}$
ANY persons dread the performance of this simple part of floriculture, which is not at all difficult unless the plant is too heavy or unwieldy. First, there should be in readiness some broken potsherds, bits of charcoal, or the like, for drainage, and the extra soil for the larger pot to which the transfer is to be made. This soil should be thoroughly damp - not wet and muddy, but so as to sift nicely from the hand. The articles for drainage should be placed in the bottom of the pot to the depth of about half an inch, with an additional half inch of moss if convenient, after which the whole should be covered over with a layer of the earth prepared as ahove. The plant to be transferred is supposed to have been watered some hours before, so that the earth will not crumble away from and tear the roots. The right hand, with the palm downward, should be placed over the surface of the ball of earth surrounding the plant, so that two fingers will be on each side of the stem; then pot and plant should be lifted bottom upward with the left hand, and the pot gently struck against the edge of a table, when it will ordinarily come off nicely. Should it, however, prove rootbound (that is, with the roots so crowded as to adhere to the sides of the pot), a few stronger blows will cause it to relinquish its hold. The young rootlets, if fresh and healthy, should not be clisturbed; if dead - as will sometimes be the case from having been either too wet or too dry-they should be cut off, as they would be an unwholesome element in the pot, and would have a tendency to prevent the growth of new and healthy ones. The large or broken roots necessary to be removed should be cut smoothly with a sharp knife.

With very large plants that are too weighty to lift in the hands, by putting a thick bandage around their stems or trunks to keep the bark from being bruised, a rope can be attached with a loop or loops through which a stout stick can be slipped, when it can be lifted, and the ends of the stick be rested on something of sufficient height, and the pot or tub driven off. This process generally requires assistance; but if alone, and we can at all raise the plant, and the spirit moves us then and there to make the change, we frequently settle the matter by a few energetic blows with a hammer, which leaves us with a broken pot and our plant free for its new home. In repotting such, care should be used in straightening out the roots as far as possible in various directions, to prevent matting, supporting the plant during the operation, and sifting the soil in carefully and evenly. If the plant has matted its roots, it is sometimes best to cut off clean with a sharp knife the ball of earth and such rootlets as it may contain, about an inch or more from the bottom. If the ball is found very dry, it will be advisable to soak it in a pail of water until it becomes thoroughly saturated, when it should be laid aside for a few minutes to drain before being repotted.

The plant thus removed, with its ball of earth, should be gently set down in its new receptacle; and, if found to stand too high or too low, earth must be removed or added, until the surface is within about an inch of the edge of the pot, and carefully pressed down around the plant to secure it in its place, in an erect position. It should then be watered and set back a little from the light, and again watered about the second or third day, or sooner if it begins to wilt, but sparingly at first. If the soil keeps moist after the first watering, the plant should have its leaves carefully damped two or three times each day, but on no account should water be put on the soil until it gets partially dry. This delay is to allow new roots a chance to start. If a plant is slow to start, it should be placed on a board, under which a hot brick, or a pan of boiling water, changed two or three times daily, has been set. Plants should be guarded against drying winds and the heat of the sun for a few days, until the roots shall have established themselves in their new quarters.

After removal the foliage will generally fall, but only to be replaced by such as will be healthier and more pleasing to the eye. Sometimes our greatest expectations will provokingly disappoint us, but a true lover of flowers will not be discouraged thereby.

Sometimes plants have to undergo the process of being potted backward, as it is called. This is when they are weak, diseased, or refuse to bloom when they have too much rootroom. In this case the plant is removed as before, and the hall nicely and evenly trimmed and pressed into a smaller pot.

When soil is exhausted, or becomes filled with vermin, it many times benefits a plant to wash the earth entirely from the roots, which should be done gently so as not to injure the young and tender rootlets.

We have frequently had admirable and unexpected success with hothouse plants in our ordinary living room, where there was no moisture except what evaporated from the earth in the pots, with an occasional pan of water set upon the stove in winter. One or more pans of water, according to the size of the collection, placed near the plants in a hot, dry room, will facilitate the growth; butordinarily, damping the leaves and keeping them clean will prove sufficient; and this much at least should always be done. We mention this, as many think the raising of a plant from the hothouse an impossibility.

Hothouses are usually built low, so as to be kept at a higher temperature, and water is used so freely that there is a great deal of moisture in the atmosphere, which helps the plants to a growth something approaching what they would have in their tropical homes. When we enter these low-built houses, the plants are so seductive, either through their gorgeous blossoms or ample and variegated foliage, that we can rarely resist the temptation of carrying away one or two trophies, while knowing that we cannot expect them to thrive quite so well when reduced from their high diet, as it were; but yet we find they do well enough not to entirely discourage us. A few failures make more lasting impressions than constant and complete success; and if we study out the canses of those failures, the lessons will not be too dearly bought.


## WATERING PTANTS.

OOD culture is secured as much by care in watering plants as by anything else; for if too much water is given, it is worse than giving too little. Many inexperienced cultivators have an idea that to be told to give a plant plenty of moisture means to keep it wet and cold all the time. For an intelligent discrimination in this regard, it is of the first necessity to understand the native seat and habits of the plant. The Fuchsia, for instance, is a native of Brazil on its mountain slopes, and is accustomed to a moist atmosphere that never becomes stagnant. Like conditions must as nearly as possible be artificially secured in our latitudes; it must therefore have plenty of moisture and be guarded from strong sunlight. The Calla Lily needs a large quantity of water (in fact, will grow in water) up to the time of flowering; after which it is better to put it in a bed or border to get a season's rest, depending upon the clouds for its supplies. Begonias and Ferns need plenty of moisture, but abhor stagnation; and it is better to syringe water over the leaves than to be constantly drenching the soil around the roots.

A good thing for the plants is to let them occasionally go dry at the roots. This is nature's remedy, for even in the wettest climates there are some dry periods. No plant should be allowed to drop its leaves for want of water; a watchful eye can do more than set rules in the proper watering of plants. If the leaves droop, unless in newly potted plants, water is called for, and should be applied to root and leaf. The ear can also be utilized: a knock on the side of a pot will disclose the need of water by the hollow sound emitted, while a dull, heavy tone shows there is already water enough.

If the soil remains wet a long time in a pot or box, which is technically styled "waterlogging," some means to dry it should be devised, as boring holes in the box, placing the pot on a warm stove, or on its side to drain, or the like. The smaller the pot or box, the more watering the plant requires, all things else being equal.

All succulent or thick-leaved plants, after they have made their season's growth, may be put away for rest, and be left without injury, and even to advantage, for many months, deprived of water, in a dry place, which, however, should be kept free from frost.

$\mathscr{T} R U N I N G \mathscr{P} I A \mathcal{N} T S$. NDER the three terms, Pruning, Cutting Back and Pinching, are understood only different clegrees or forms of the same process. The pinching is simply a milder pruning with the finger and thumb; and the cutting back is mainly applied to the pruning off of all dead wood back to the quick, or the restoring of a plant or shrub to its proper shape when it has grown misshapen by neglect. Pruning is best done in the Jate fall or early spring, while the sap is at rest; it consists in removing the useless, thin, poor shoots of the previous growth. But little pruning would be needed in amateur culture if the finger and thumb, under the guidance of a watchful eye, were used freely in removing, by what is technically called pinching, all poor growths while the shoots are soft and green.


## INSECTS.

HESE pests, the bugbear of amateurs, as a rule settle only on plants that are in a slow state of growth, or that are suffered to become dirty. Besides their destructiveness, they render plants untidy and soiled; and where they become epidemic, as it were, they render them dingusting. It is only idleness or ignorance that allows insects to injure plants; and those having only a few in pots have no excuse for being tronbled with them. Cleanliness is nature's great remedy. When they make their first appearance, the whole plant should be washed with soapy water, and afterward dipped two or three times into a tub or pail of clean water. This simple process, repeated whenever necessary, will keep a large majority of plants free from the insect nuisance.

## FOLIAGE INSECSS.

Aphis Rosr.-This insect, known also as the green-fly, is one of the most common of plant insects, and is so named by reason of its fondness for the tender shoots of all species of roses. Still it is not at all particular as to diet, and feeds promiscuously on almost any plant upon which it finds lodgment, except perhaps such strongly scented ones as some kinds of the Geranium. Taken singly, it is not at all repulsive, being in color the most delicate, transparent green, and frequently with beautiful gossamer wings, and has, for such a small creature, a firm and stately walk. Collectively their destruction is great, as all the juice of the plant is absorbed to satisfy their insatiable appetite. With watchfulness this plague may be kept down in small collections. Fumigation is the best remedy for them, and this operation may be performed either in a room, close box or barrel, by placing damp tobacco-stems or leaves on some coals, in some kind of fire-proof vessel, and care being taken that they do not blaze. Most rongh-leaved plants cannot eudure Fy fumigations, and are, in greenhouses, put under the staging when this work is going on.

Thrips.-These are small, spotted flies related to the aphides, and found on the backs of the leaves, though they will attach themselves to any portion of a neglected or unhealthy plant. They are not quite so easily got rid of as the green-fly, but washing the plant in tobacco-water, and afterward in clean water, will drive them off. The best remedy is a solution of Gishurst's Compound, a kind of soap sold by first-class seedsmen. This will not only destroy these insects, but most others. The scaly bugs cannot withstand it, and angleworms will die if it drops upon them. It also acts as a stimulant to plants, and is not enough known to amateurs in this country.

Red Spider, so called, known by its classic name as Acarus, is an insidious enemy to plants. It is a minute insect, but capable of producing considerable destruction, as it feeds on the most delicate parts of the leaves, causing them to soon perish. It is about the size of the eye of a fine cambric needle. The body is usually red, though sometimes brown. They congregate on the under sides of the leaves in great numbers, where they feed like a herd of cattle on a broad plain.

When a plant is suspected of being infested, or if the leaves perish and no other cause is known, a leaf may be turned over on the finger, and held so until the warmth passes through it, when, if there are any, they will be seen like mere specks of dust beginning to show powers of locomotion. The fine webs created by this small, insignificant creature, clog and impair the functions of the foliage, which are really the lungs of the plant. Dryness of the atmosphere is very favorable to the existence of this insect, and, as it has a repugnance to water, sprinkling, syringing or pinning wet cloths or papers around individual plants at night, is the remedy. A very good preventive is to keep a pan of water on the stove in winter, as it gives off a vapor to the atmosphere. A little flour of sulphur sprinkled on a heated brick or flat-iron, placed where the fumes can rise up among the leaves of the plants, is also an excellent remedy.

Mealy Bug.-This is an entirely innocent looking insect, but yet at times exceedingly troublesome where plants are kept at a high temperature, and is consequently found more frequently in a hothouse, from whence it is many times transferred to the greenhouse. It is a small, oval insect about an eighth of an inch in length, with a slightly rounded back that is covered over with a short, white plush; the body underneath is brownish in color, and from the sides articulate several tiny legs. It more often rests at the axils of the leaves, yet many times underneath them. Where they accumulate to a great extent, whale-oil soapsuds is efficacious, or they can be brushed off with a small brush.

We have never had them to any great extent, and our method is to lift them off with a needle, as bruising them on the plant is said to be injurious on account of the juice that escapes. The eggs are deposited in little, white, webby knots, and left by the parent on various parts of the plant. Under the microscope, when torn asunder with two pins or needles, so as not to crush them, there are revealed several brown eggs-some half a dozen, or less.

Coccus.-There are several kinds of insects known under this Latin name, that in our vernacular are called scales, being in color either brown or white. They are a rounded oval, their encasement being a glossy, tough skin or shell. They adhere closely to the leaves or stem on which they feed, and are not easy to dislodge. As far as our own experience and observation go, we find the young to be migratory, but probably not for any
great length of time, as we find them fixed when quite small, in which condition they feed and grow. The eggs are hatched under the parent, and in lifting a large one with a needle it is no unusual thing to sce the litter of young run about in a hurried manner at the unwelcome disturbance.

Washing with strong soapsuds is a remedy for this amoyance. If picked off by hand, washing should not be neglected, as it destroys the young; fumigation will not answer so well. We remove them by ruming a needle through the crown of the shell, and washing afterward. The white ones are very partial to Oleanders. They are also fond of Olives, Camellias, Acacias, Calla Lilies, Oranges and various evergreen trees.

Verbena Mite.-This is a microscopic insect that destroys the plant for whieh it is named, as also the Heliotrope and other rough-leaved plants, causing the foliage to turn brown. It is difficult to dislodge it, as it cares but little for water, fumigations or ordinary methods. To promote a vigorous, healthy growth of the plant is the best remedy.

Roller Caterpillar.-This insect, perhaps more commonly known as the Rose Slug, is the larva of a moth, that makes its appearance carly in May and lays its eggs on the under side of rose leaves. These hatch out in a few days, producing the small, green eaterpillars, which at once begin to eat the leaven on the under side. Toward evening they creep on the upper side of the leaves, where, if not disturbed, they will eat all night, and leave the foliage as if it had been burned. With watehfulness at the proper time they are easily got rid of by being carefully picked off and killed, and the first lot disposed of is generally the last of them for the season. Hellebore powder or Paris green sprinkled on the leaves when they are damp or wet will destroy them; but the safest thing to clust upon roses is soot from soft coal, for when it washes off it acts as a useful stimulant. In fact, soot mixed with guano, in about equal quantities, and boiling water poured upon them, make an excellent liquid manure for all kinds of flowers; which, when diluted in the ratio of one part to three of clean water, may be poured over the heads of plants, keeping them free from insects and at the same time contributing to a healthy growth. It is not advisable to use poisonous remedies against insects; it is far better for the plant as well as its care-taker if the latter use only the eye, the hand and the great natural eleanser, pure water, with an oecasional admixture of soap.

Rose Beetle.-This small insect derives its special name from its partiality to rose leaves, being seldom found on any other plant. It is not very destructive or numerous, and can be easily disposed of by keeping the plants clean and in good order. Thousands of Roses are made unsightly or destroyed every season by insects whieh a little preeaution on the part of the cultivators, in the timely application of common remedies, might readily have prevented.

Tobacco Worm.-This is a worm which attacks other plants besides tobaceo, especially creepers, and has a special liking for the Ampelopsis or Virginia Creeper. If not disturbed it will soon make its presence known by eating off the leaves, and even the tender shoots, straight before it. It generally appears in June, and under various colors, according to what it feeds upon. It grows to a monstrous size, being sometimes from four to six inches long, with a formidable looking horn; and often shows fight when disturbed. Being large, there are never very many on one vine; and they are taken off one by one and killed. They are the larva of what is commonly known as the death's-head moth.

## ROOT WORMS.

The enemies to plants are not those alone that are classified as foliage insects which feed upon stem, leaf and flower, but there are others that infest the soil and burrow among the roots. These are the most dangerous, as they often remain hidden until the mischief is done. They can, however, be detected by the watchful cultivator, through certain symptoms, such as stunted or retarded growth, or continued weakness of the plant without any apparent cause. A good general precaution is, while raking or sifting the soil, to cast aside grubs, chrysalides and all traces of insect life.

Angleworm.-This worm, also known as the earth-worm, does far more damage by the displacing of the earth than from any actual injury. In tunneling through the soil, in search of nutriment, it swallows a portion of it, and this is brought to the surface and forms what is called a worm-cast. The best way to be rid of these is to turn the ball out on the hand, and where any are seen, seize them before they have a chance to withdraw, and pull gently until they come out entire. Another method is to pour some weak lime-water on the soil, when the worm will rush to the surface, where they can be destroyed. An application of a teaspoonful of liquid ammonia in a pint of water will also force them out.

Milleped.-This is a small, glossy worm, not infrequently found in leaf-mold, decaying vegetation, and occasionally also upon the collar or crown of a diseased plant. It has a hardened or shelly covering composed of concentric rings, numerous fringe-like feet which move in an undulatory manner, and two delicate antennæ, and when touched curls in a ring with the head inward. They are very fond of moisture, and by laying a piece of damp moss or a folded piece of damp paper or cloth on the soil, they will congregate under it so that they can be taken off in great numbers. Where there are many in a pot, they granulate the soil-to such an extent that plants cease to thrive. Watering with limewater is useful in clestroying them, but a little soot mixed in the soil is still more effective.

Cut-worm.-This is a black-gray slug which generally feeds on soft, young plants in early spring, and cuts them off about the collar, just beneath the surface of the ground. There is no remedy for this slug lut to catch and kill it. To guard a plant from its approach, pieces of coarse cardboard, or of tin, bent into a cylinder, and embedded about an inch in the soil, encircling the stem of the plant, constitutes a serviceable protection. Another good way is to trap them under sods of grass turned downward; they delight to creep under such covers, where they may be picked up every other day or so, and killed. The cut-worm is the larve of a fly not unlike the mosquito in shape, but with a body about an inch in length, and having long, awkward looking legs. The females have thicker bodies than the males, and should be destroyed on sight. This pest is so numerous some years that it destroys whole acres of herbaceous plants. Once on the coast of Galway, in Ireland, the trees and shrubs in an area of many square miles dropped their leaves through its having eaten all the young roots; but the law of nature's compensations was made manifest in the increased prosperity of hogs and chickens.

Wire-worm.-This is a reptile mostly met with near sloughs or damp places. It lives upon the roots of plants, more especially of Wallfowers and Stocks, and is easily driven out of pots or from the roots by applying a weak dilution of aqua ammonice-say a tablespoonful to a gallon of water - or by a slight admixture of soot in the soil.


ISEASE seldom takes hold of plants while surrounded by such circumstances as are favorable to their full development; ordinarily it springs from neglect, but occasionally from accidental causes, such as deterioration of soil, overpowering by dust and dirt, overcrowding, and the like. The leaves, being the lungs of the plants, must be sedulously guarded from becoming clogged with dust, deranged by insects, or scorched by exceeding heat, all which are prolific sources of disease. Everything about the roots and rootlets should be sweet - that is, free from offensive odors - and composed of substances that are easily dissolved by rain or water; for the rootlets, being the mouths, will rcfuse unwholesome food, and the plant will soon sicken.
Mildew.-This is a fine, minute, white, fungus growth, not peculiar to plants, but affecting them as well as other things where the conditions are favorable. It generally arises in plants where an unequal temperature or distribution of moisture prevails in the different parts, as when any one portion is too dry, too wet or too cold. It is most easily removed by applying through a common pepper-box a very light dusting of flour of sulphur on the parts affected, and prevented by maintaining equal conditions in the various parts of the plant.

Blackrust.-This is a black, moist, fungus growth that is produced mostly by excessive moisture and the absence of the necessary amount of warmth. The remedy is the same as for mildew, with the addition of securing greater heat.

Damping Off.-This disease is mostly caused by want of air, changes of temperature, or excessive moisture; and therefore most frequently occurs among plants, cuttings and seedlings that are overcrowded. A little powdered, dry charcoal, or dry sand, sprinkled in among the plants, will help to keep it down, when the diseased ones should be carefully removed; and, if still too crowded, even healthy ones must be sacrificed.

## PRACTICAL PRECEPTS.

1. Syringe the leaves of plants, unless in extremely cold weather, at least once a day, with water at the temperature of the place where they are growing; when syringing or sprinkling in the hot sun, the plant should be shaded, otherwise the leaves will become spotted.
2. Give plants fresh air by letting down the windows when the outside temperature is sufficiently high; at other times by opening the doors into other rooms.
3. Shield the rootlets of plants from a too close contact with the rays of the sun; as by encircling the pot in a larger one, or by protecting the box with a detached board or sheet of paper at some little distance, to intercept the direct heat.
4. Protect all plants from extreme changes of temperature, from drafts and puffs of cold air.
b. Remember to give plants their needed season of rest after they have finished flowering, by withdrawing them, with the exception of a few creepers and the like, into the shade and withholding the wonted supply of water.
5. Relieve plants by cutting off all dead flowers, leaves and branches; this will serve to lengthen the season of bloom; but care should be taken not to allow the refuse to accumulate on or around the pots or beds. Keep plants that tend to a straggling or spindling growth, shapely and compact by cutting off all weak and misplaced shoots.
6. Relieve plants from insects as soon as detected; do not wait till tomorrow, for by tomorrow you may have no plant worth speaking of. To keep your collection free, examine and, if necessary, purify all new acquisitions.
7. Keep a few cups of water among house plants, to evaporate; where saucers filled with water are used for certain plants, these cups are unnecessary.
8. Where a plant is grown with a saucer of water underneath, raise the pot above the water by little wooden blocks or stones.
9. Keep the soil sweet by occasionally letting it go a little dry, or stirring it up gently with a fork; a table fork will do for house plants.
10. Never throw away soot; mix it in the soil, which it will help to fertilize, while it is very effective in driving away insects; it will also heighten and beautify the color of all red and blue flowers.
11. Never waste soapsuds; it can be applied with advantage to all kinds of growing shrubs and plants. Even in winter it can be utilized by being poured upon a manure or compost heap, or where plants are to grow the ensuing season.
12. Use moss freely as a topping for the soil in pots and boxes; if put on neatly it is ornamental, besides being useful in retaining moisture and protecting the upper rootlets until the leafage is sufficiently developed to discharge that function. Sponges may be placed among plants and watered for the like purpose of maintaining moisture, being also susceptible of ornamentation by sowing in them the common garden cress or canary grass.
13. Mix well all soils for plants; making of the several ingredients one homogeneous mass, carefully throwing out all the lumps, half-rotted bits of wood, and other refuse.
14. Protect plants against heavy drippings from houses, trees, and the like; none will thrive under such an infliction.
15. To insure a pleasing succession of flowers in plants of the same species, select different varieties, or set those of the same variety at different times; indeed, nature will, unaided, secure a partial continuity, as scarcely any two will bloom at the same time.
16. Throughout the flowering season, apply alternately plenty of water and weak liquid manure to all bulbous and free-blooming plants. Where plants grow too fast, the temperature should be reduced.
17. In watering house plants some discretion should be used to save carpets from the drippings; several ingenious contrivances have been devised, and they are purchasable at seedstores; but most persons can extemporize their own.
18. Do not cut off the withering leaves of bulbous plants, but let them die or decay naturally and fall off in due season, as while the leaves decline the sap goes back into the bulb, replenishing its store of strength for the ensuing season.
19. Steep new pots to close the pores, but allow them to drain off before using; thoroughly wash old ones, and scald them to kill fungus.
20. In raising plants, sow the seeds unsparingly; it is easy to weed out the poor and weakly seedlings, leaving of the strongest as many as may be desired for vigorous growth.
```
CULTIVATION AND ANALTSIS OF PLANTS.
```

If it is preferred to use home-raised seed, always select from the best-shaped and prettiestmarked flowers, designating them while yet in bloom by a system of letters or other marks, which will indicate their character and color, written upon proper labels.
22. Accustom plants to plenty of air before permanently removing them out of doors; or, when taken out, temporarily protect them from cold spells by frames or otherwise.
23. Do not pull up slips or cuttings to ascertain if they have rooted; this fact may be learned without prejudice to the rooting process, by probing at their sides; and, ordinarily, by noticing the character of the leaves - vigorous or otherwise - they shoot upward.
24. Do not paint the receptacles or surroundings of plants a green color, as it makes the foliage look pale by contrast; and, heing themselves green, any other color whatever will produce a better effect; drab, lemon, slate or white forms a good contrast.
25. Before using tobacco-water to destroy insects on plants, ascertain its strength by experiment on a single leaf; if too strong it will discolor the leaves and hurt the plant.
26. Put small plants in small pots, transplanting to larger ones as they increase in size; too much room gives too much moisture, and thereby retards the healthy action of the rootlets, which naturally seek the outside of the ball of earth to get air.
27. Turn window plants around to the light once or twice each day; otherwise they will grow one-sided.
28. Utilize tulip-beds and the like, after the plants have finished flowering for the season, by sowing therein the seeds of annuals, or transplanting thither some bedding-out plants, as Verbenas and others.
29. On the approach of a frosty night, prolong the freshness of window plants by drawing them away from the window, or interposing some shield between them and it.
30. To protect outdoor plants and lengthen their period of hlooming, on the approach of frost use heavy coverings, as old carpets, quilts, or good, stout wrapping papers.
31. Use common clay pots for immediate contact with plants; if the glazed kinds are desired for ornamental purposes, they should be procured large enough to admit placing the common kinds within them.
32. Wash salt-water sand free of salt before using it around plants.
33. Keep plant soil as nearly level as possible, to insure uniformity in watering and in applying liquid manure; the practice of piling up the soil around the stems is both injurious and unsightly in house plants.
34. If plants need support, set the stakes firm in the soil, burning the ends slightly where there is danger of sprouting.
35. To ripen the wood of plants, place them, after the season of flowering, on beds of coal ashes, as a protection against worms.
36. In taking up plants in the fall, cut around the plant so as to mark out a ball a little smaller than the intended receptacle. This should be done with a sharp knife or spade, without reference to the rootlets that may be cut away. Thus circumscribed, it should be allowed to remain a week or ten days before removing, keeping the ball wet meantime, and be then transferred on something broad enough to sustain the whole ball.
37. Do not take up plants from the open ground too late in the fall for winter growing; it is better to sacrifice two or three weeks of their beanty in their old location outside than to have miserable looking plants half the winter indoors.
38. Give fresh air freely to plants newly brought into the house, opening windows and doors in pleasant weather for the first four or five days; the change is great to them, and if they are neglected in this respect their leaves will turn yellow and die.
39. Remember that liquid manure is to be applied only when plants are growing; and that it is safest to administer it weak and often.
40. Buy plants always from neighbors or well known growers: for the first are near to remonstrate with and receive explanations from if anything is wrong; while the latter will, through care for their own reputation, if for no higher reason, be likely to do you justice.
41. Do not waste time and money on poor plants or cheap seeds; good ones will occupy no more room, and will give much more satisfaction.
42. In house plants, pot the cuttings, slips or shoots, before the roots have grown too large; even a single root, half an inch or an inch in length, will be suffieient to insure success.
43. If in doubt about the treatment of a plant, study its nature, habits, and wants, as described elsewhere.
44. In cultivating plants, be mindful of the old adage, "a stitch in time saves nine"; and be assured that continual watchfulness is the price of the highest success.
"What landscapes I read in the primrose's looks, And what pictures of pebbled and minnowy brooks, In the vetches that tangled the shore!
Earth's cultureless buds, to my heart ye were dear, Ere the fever of passions, or ague of fear, Had scathed my existence's bloom;
Once I welcome you more, in life's passionless stage, With the visions of youth to re-visit my age, And I wish you to grow on my tomb."



## ACHYRANTHUS.

 or house plant. The beauty of its varied foliage will enhance the attractiveness of the best collection. It will grow in any common garden soil, in an atmosphere ranging from fifty to seventy-five degrees, the latter grade being absolutely necessary for a rapid growth. A few of the bright-colored varieties, as the A. Lindenii, with its long, pointed leaves, are always conspicuous among a collection of window-plants, the bright red foliage contrasting admirably with the surroundings, and producing almost the effect of flowers among the green leaves of the other plants. The varieties known as Gilsonii and Aureus Reticulatus have rounded leaves, the latter being , also conspicuous for their gold and crimson web-like markings; while the former are generally an intense crimson, but with weakening shades down to a salmon color. They form an effective ornament when introduced among Rose Geraniums or other like green foliage plants; and can be planted so as to assume any shape to suit the taste of the cultivator, as a circle around other plants, a cross or heart in the midst of others, and the like. They can be easily kept from straggling by pinching back with the finger and thumb, and thus maintained for a whole season in the shape it was originally designed they should present. For winter plants, a few cuttings should be taken in July, and put aside in a shady place, either in sand or common soil, where, if well watered, they will strike root in from ten days to two weeks, when they can be potted for use. These new plants will prove far superior to the old ones.

$\mathcal{A} G A P A N T H U S$.
ONE among the Liliaceous plants, to which order it belongs, is more picturesquely beautiful, perhaps, than this pretty azure-blossomed flower. The name signifies, in the original Greek, a love-flower, and the plant is sometimes called in our vernacular the African blue lily. It is a very ornamental plant for the parlor, the outdoor pedestal or tree-stump, and, indeed, will show itself to advantage anywhere. Its long, graceful leaves, curving to either side of the bulb, make it attractive even when not in bloom. From among the leaves it shoots upward, to a height of from eighteen inches to three feet, one or two stout flowerstalks, which are crowned with a mass of azure flowers, springing from and surrounding a common center like an umbrella, whence the epithet umbellatus. The bulbs are among the class known as Cape bulbs, because originally introduced from the Cape of Good Hope. They require a liberal allowance of pot room, as they send
out very large rootlets, which will sometimes break a pot if not removed in time to a larger one. They grow well in a good, sandy loam, which should be well packed in among the rootlets. It is sometimes of advantage in transplanting to give them an entirely new soil, care being taken not to hurt the live roots, and dead ones being cut out with a sharp knife or scissors. The Agapanthus is among the few plants that grow more valuable with age. Even the leaves can be kept green, if desired, from year to year without apparent detriment; one or two will perhaps fall off in a season, but these will be replaced by others. It is slow to evince any sign of disease, and should therefore be all the more carefully tended. Its enemies are most frequently the seales, and occasionally the mealy bugs. The season of blooming raries from spring to fall in different plants, mainly according to treatment, and not infrequently they will flower twice in the same season. After flowering they should be given a season of rest by being supplied with less water for one or two months, whereupon they will perhaps again show signs of new growth, when they should receive a more liberal allowance of water. While blooming, they require a free use of liquid manure. Being natives of a warm climate, they delight in a moderate heat, and will not thrive at a lower range than fifty five degrees.

$A \mathbb{T} E R N A N T H R R A S$
NDER this name, formed probably from the changing habit of the leaves in respect to color, is introduced a pretty, low-growing or dwarfish plant of the Amaranth family. It delights in a rich, sandy soil and in an abundance of water, when freely growing in a warm atmosphere, in or out of doors. Under the sun's heat, the leaves assume in succession many different colors, as green, brown, pink, carmine, orange, and yellow, frequently rivaling the various shades of our forest leaves in autumn, or the beauties of the rainbow, whence it is sometimes called Rainbow Plant. Being small and easily kept under control with the knife, scissors, or even the fingers, they are much used for number, name or phrase work in fancy parterres; and the ontline of such words, phrases or numbers can be easily maintained through an entire season by clipping, as they not only are not injured thereby, but receive the added advantage of a more compact growth. They will endure a greater degree of heat than almost any other plant, and their colors become deeper and more beautiful in the full glare of the sunlight. Though but of recent introduction, they have already sported into many handsome varieties. Of these the best known are: A. tricolor, which derives its distinctive appellation from the three most frequently-recurring colors, a rose ground with yellow bands and purple veins. A. magnifica, because larger, stronger, and more magnificent in every respect, including color. A. spatulata, from the spatulate, that is, obovate, ohlong, or battledorelike form of the leaves, which are commonly a bright crimson and green. A. grandis, among the most recent varieties, is so called because of its still stronger habit of growth, and superior effectiveness in combination, the leaves being bronze with rich magenta tips.

## AMARYLLIS.

 planted in pos, grew leaves, and filled their pots with thick, white roots as large as a pen-holder. In due time they lost their leaves and went to sleep, and we intended keeping them dry, as directed. By some means, two got enough moisture to retain their long roots, and they bloomed the following spring; the third spent its strength in forming roots again. Of course, under proper circumstances, they should blossom every year. Abundance of water and occasional applications of mamure-water are required during the season of leafage. They should be set in not less than seven-inch pots, with about half the bulb bedded in the soil.

$$
A S T E R
$$

or spent hops and good loam, with a slight admixture of sand. To
rest and ripen the bullbs for future use, after the flowering season, the pots are
embedled in the soil in the open air until the approach of winter, when they should be taken where they are to grow and bloom. Our own experience is practical, so we will give it. Wc purchased five bulbs, two with persistent foliage, and three that would keep it only a part of the year. These last we flowers, blooming gencrally in the winter and early spring. This family of plants has been much divided of late years, and the many known to the masses under the above name have other appellatives as well. They delight in a rich soil made up in about equal parts of well-rotted manure (sweetened by exposure to the air), leaf-mold
HE Amaryllis, through atl its various species, produces the most brilliant





## $A Z A 工 E A$.

ARELY cultivated as window plants, the Azaleas are in great demand for exhibition purposes, and for cut flowers in winter and spring. There is, however, no reason why they may not, with reasonable attention, be successfully cultivated as house plants. The soil for very young plants should be nearly all peat, or leaf-mold, where peat cannot be procured; but for older ones, three parts peat and one part each of loam, leaf-mold and sand. The time for repotting is after the blooming season, except the plants are large and have appropriate sized tubs or boxes, when they will not need it for several years, requiring only that the soil be enriched with liquid manures. The plant belongs to the heath family, and, like most of that tribe, have roots somewhat resembling the fern, which should never be allowed to become entirely dry, care being taken not to go to the other extreme and drench it so that the soil would sour and the roots decay. The average temperature required is between fifty and sixty degrees, and plenty of air, provided it be not under that temperature, should be always admitted. They bloom from February to May, and the larger ones produce hundreds of flowers, at once delighting the beholder with the munificence as well as the magnificence of their adornment. The flowers of some varieties are white, while others run through all the various shades of red, from rose to bright carmine, often beautifully marked, like the carnation.

$\mathcal{B} A L S A M$.
OWEVER much these plants are valued, they seldom receive the attention which they deserve. It is true that the miserable manner in which they are many times sown and left to take care of themselves may partly account for this, for under such circumstances they are far from attractive, as the flowers are apt to partake of the quality of the plants. Rightly grown, however, they form most magnificent specimens for garden or conservatory decoration. For early plants the seeds should be sown in a hotbed. As soon as they develop two leaves besides the two thick seed-leaves, they should be, removed into pots or boxes, and these he plunged again in the bed. During growth they should be allowed plenty of air, and ample room for their branches to extend; and by supplying a richlymanured soil they may be made to grow to a great size.
The Balsam delights in a moist, well-manured situation, and is among the handsomest annuals cultivatied. The plants should frequently have waterings of manure-water; and, as their stalks are succulent, they should never be allowed to suffer from drouth. While most plants suffer from intense heat, these seem to clothe themselves with greater beauty in the very height of summer. When the main or central stem is of sufficient height, the pinching out of the tip has a tendency to increase the side branches.

In the garden they should be set about a foot and a half apart, with the same care for their nourishment as in the conservatory, stakes being supplied them to prevent their being overturned by the wind. The flowers are rich in quality and in colors, being either plain, spotted, splashed or streaked, and in the double varieties they fully equal the Camellia. For bouquets and decorative purposes fine thread-wire is drawn through them in the same manner as for the Camellia, and the ends brought together, thus leaving the flower in a loop, and forming a manageable stem. A little damp moss or cotton-batting being then placed at the base of the blossoms, keeps them fresh for some time. The flowers of this plant occasionally bloom double without the aid of the cultivator.


## $\mathcal{B} E O N I A$.

AINLY cultivated in the hothouse until a comparatively recent period, Begonias are now kept principally in the greenhouse, except when it is wished to stimulate them to an extraordinary growth, for which purpose the hot, steamy air of the former is more suitable. Of the Begonias there are several kinds, differing in both leaf and flower. The first and probably most cultivated are those popularly known as the Elephant's Ear, with large leaves, oblique and rounded at the base, and sharply pointed at the apex, with the upper lobe, or half, much more developed than the lower. They are richly colored, being changeable in tints from bronze to green, with large silver bands in some, and irregular spots in others, the underside being of a reddish-purple tint. The upright or bushy varieties have transparent stems, many of them with glossy, irregular, waxy leaves, while the flowers are of various colors, from white to bright carmine. The broad-leaved kind should be watered freely during summer; the other species when in bloom, and at other times just sufficiently to keep them in fair condition. There are also some with tuberous roote, which can be laid away during their season of rest, in any place that is free from frost, the roots only being sparingly moistened. Begonias should be only sprayed, that is, lightly syringed, as the water hears the leaves clown to such an extent that they do not spring upright as readily as other plants. The soil used is one part peat, one of loam, and one of decomposed manure. The large ones are easily propagated from the leaves, thus: Take a leaf, cut the stem off rather close, lay it on a surface of wet sand in a pot or box that can be covered with glass; pin the leaf down with hroom splints, then with a knife cut across the large veins in numerous places, and at each cutting roots will start, from which young plants will spring. These should be potted as soon as the leaves get to be from half an inch to an inch long. Many of these plants accommodate themselves readily to the family sitting-room, only they must be kept free from frost. We have some of the large-leaved ones that have for several years hung just back from the windows, where they get about an hour of sunshine daily, and this in a small, ordinary parlor, requiring no great care except hanging farther in on extra-cold nights, the ordinary watering daily, or less frequently in winter, and dusting the leaves with a small feather-duster.

have many deep angles, with curious swellings with each set of spines; the Epiphyllums have flat leaves without spines, producing flowers at their margins; Melocactus is the genus familiarly called Turk's Cap; and the Mamillarias are distinguished by their numerous tubercles or small, rounded projections.

All the Cactaceæ will grow in any soil where there is no stagnant moisture nor actual frost, but for the best results they should have a soil composed of loam, leaf-mold and sand, with abundant drainage. A group of any of these plants forms a very attractive object in a window. They are very free from insects, causing little or no anxiety in that respect, though some beetles will feed upon the young tips. Like all succulents, they need comparatively little water; if shriveled, however, the roots and enveloping earth should be soaked in a pail of water for two or three hours. While growing, they need water about three times a week, and every day if in very small pots. Slips may be taken from the parent plant, and inserted about an inch deep in comparatively dry sand. Some genera, as the Echinocactus, Melocactus and Mamillaria, are also propagated from the tubercles or offshoots, and from seeds.

The Staphelias are Cactus-like plants that require the same treatment. Young plants are potted about once a year; large ones, when in good sized pots, only once in three or four years. These plants are all fond of heat and a dry atmosphere.


$$
C A X A D I U M
$$

NOWN to florists and many amateur culturists as a suborder of the handsome-leaved Arum family of plants, the Caladium is itself subdivided into almost innumerable species and varieties. Of these perhaps the most conspicuous are the C. esculentum and the C . odoratum, both of which are cultivated mainly for the size and beauty of the leaves. These often measure, under fair cultivation, thirty-six inches in length by twenty-four in breadth. Both of these species present a majestic appearance scattered singly through a lawn, on the bank of a rivulet or pond, or collected in groups at convenient distances, their shield-like leaves making them a somewhat conspicuous ornament among other foliage. They delight in abundance of water, and grow best where it is close at hand; but if planted on higher grounds the roots should be thoroughly drenched with water at least once a day in warm weather; they can hardly have too much. A depth of eighteen to twenty-four inches of good, rich soil must underlie them.

The approach of frost should be anticipated in preserving these plants for future growth, as they are very sensitive to cold. Leaves, stems and roots should not be plucked off, but should be allowed to dry back to the tuber, which can be then kept in a warm place, embedded in sand, until needed for the next season. Smaller specimens can be kept growing through the winter, as parlor plants, by giving them plenty of water and warmth. In spring they should get a start for two or three wecks indoors before being put out, as they thrive much better afterward for that preliminary indulgence. The roots of the
x
small, fancy ones should be kept in their pots and have just a little moisture, else the tubers are apt to perish from "dry rot" and be entirely lost. The smaller varieties are among the prettiest marked foliage plants at our command, and are almost innumerable. Many of them are so difficult to cultivate that few people can grow them successfully unless under specially favorable circumstances. There are, however, two or three pretty varieties that will succeed well as common house plants, and they can be pointed out by most florists.


## $C A M E X I I A$.

FTEN used as a pretty natural ornament for the hair of some stately queen of society or less pretentious belle, the Camellia has been very generally admired for the rich, waxy appearance of its charming, rose-like flowers. It is not very general in house cultivation, as the idea seems to prevail that it is difficult for it to accommodate itself to the circumstances surrounding other house plants. True, it does not thrive in a dry atmosphere, as there its thick, green leaves are liable to the attack of insects, but a little watchfulness would keep these away. It does not require a high temperature, the average running from fifty to sixty degrees, the lowest being at night. The best soil to use is good loam or peat. All coarse manures are obnoxious to it. The plants are sometimes repotted just before the young growth begins - say in February or March; though the best time is immediately after the flowering season. The buds of the Camellia arc apt to be so crowded that some must fall to make room for others to bloom; and, as the stems are so short as to endanger the cluster if it should be attempted to pinch out the superfluous ones with the finger, a good method is to take a sharp knife or pair of scissors and clip off the upper half of the buds to be removed, or otherwise wound them, leaving the remaining half-buds, which become sickly from the wound, and drop of their own accord. Growers of large flowers only leave one or two to the branch. When in the bud they must not suffer either from too much or too little water, as buds drop from both causes; deprivation of water for two hours after it is due, or making the soil soaking wet, is equally disastrous to the buds, and of course cuts off all hope of flowers. The leaves and branches should be frequently sponged or washed, but syringing is not recommended, as the foliage easily becomes spotted; the soil and roots should be watered regularly once a day while the leaves and buds are forming; and a little more water is needed when the buds are opening into flowers. They require light, but should not be exposed to the direct rays of the sun, as in their native woods they enjoy a natural shade through the surrounding trees. They should be removed indoors early, as the slightest frost will nip the buds. After they have flowered all winter they should be moved out in spring to some shady nook where the strong sunlight will not strike them; a few hours of the morning sun, however, will not prove injurious. From the seeds they bloom in three years. These plants can be also budded, grafted and inarched with different varieties in the same manner as other shrubs.

$$
C A N \perp-1
$$

ANDSCAPES famous for gorgeous beauty have always abounded in India, and of these there are but few in which the Canna (on this account called Indica) does not form an indispensable contributor to the lovelincss of the prospect. This has become so universal a favorite, that it is cultivated in all civilized countries; and helps to give a semi-tropical appearance to many northern conservatories and gardens. As ornaments for the parlor they are also very fine, and may be kept in good condition the year round by proper care and attention. The genus belongs to the Arrowroot family, but is not cultivated in this country for any nutritious properties, the beauty of the foliage and the flowers having engrossed the whole attention of cultivators. It might, however, be made a valuable food product. Of late years florists have produced a large number of new varieties, all of them pretty and desirable. To grow Cannas large, they should have plenty of room in a good, rich, deep soil, a loose, sandy loam being the very best for the purpose. Soapsuds or other liquid manure applied freely, say twice a week during warm weather, will be very acceptable to the plants and reward the care-taker with a greater wealth of leaf and flower. Those not wanted indoors for winter decoration can be lifted, with as much soil around the roots as possible, and allowed to dry in that condition; when the drying process is completed the tubers can be stowed away in any frost-free receptacle; they will bear a considerable degree of cold, but contact with actual frost is ruinous. For winter decoration it is best to use one or two side shoots of the old tuber, as they are just about to sprout; they should be taken off in August and placed in a four-inch pot, changing them to larger ones as they need more room. These plants grow from one to twelve or fifteen feet in height, and vary in colors of foliage from the lightest shade of green to a very dark bronze. The flowers are also of a great variety of shades.


## CARNATION.



LL through the ages much attention must have been paid to this plant, or at least to the family to which it belongs, as we find that the Pink, the primitive source of countless varieties, was known to the Ancient Greeks as Dianthus, or Flower of Jove. And to this day the varieties have been incessantly multiplied, the plant being easy of culture and thriving in almost any fertile soil. The flowers are an acquisition to bouquet makers, not only on account of their beauty, but for their clove-like or spicy odor. They can be propagated from the seeds, but such are more uncertain in quality of flower than those propagated from an old plant. Cuttings or slips can be taken freely from the old plants, and should be cut at the joint so as in breaking to leave a rounded end, or else be severed just below the joint. The slips should be set in a crock, near the edge, as close together as desired, the sand being well pressed to
cause slow evaporation, and the pot being covered with a glass while striking root. The layering process may also be used. The mode of procedure is to select strong, low-growing shoots around the plant, cut off the lower leaves and diminish the length of the mpper ones, and then with a sharp knife make a clean, slanting cut on the lower side of the stem, penetrating about half through it, terminating it near the next joint above the edge of the blade. The earth is then loosened an inch or so deep, and the layer pegged down, the end being slightly tilted to keep the wound open, and covered with fresh soil well pressed down. In this way the old plant feeds her nurslings through the half-dissevered hark until the slips take root. The Remontants, or Monthly Carnations, are much cultivated as house plants, their frequent flowering making them very popular, although the "monthly" blooms are confined to tropical and subtropical climes, and the summer months in other latitudes. The best kinds are imported from Germany and Italy, where their cultivation has been made a special industry for two or three hundred years.

COIELS.


ER I few plants had so effectually escaped the march of hybridizing improvements and experiments as this simple flower, so long the delight of the humble cottagers of Great Britain under the familiar name of French Nettle. It, however, fell under the observation of that prince of experimenters, Verschaffelt, of Paris, who gave the first impetus to the production of varieties, which have since been multiplied indefinitely by many others. It has now become indispensable to large and small collections, being a universal favorite with rich and poor. The slight blotch of bronze that ornamented the original nettle-like leaf of the simple Coleus has been made to assume, under the skillful manipulations of the scientific hybridizers, nearly all the shades of the three primitive colors, red, blue and vellow; and various combinations of these and their many shadings. So conspicuous is the tendency to change in the markings by this process that one variety has been styled the Chameleon. The number of varieties in actual cultivation is very considerable and continually growing larger. They will grow in almost any soil, hut do best in a compost of leaf-mold and good loam, requiring, however, plenty of moisture in whatever soil during their season of growth. They are very sensitive to cold, being in fact as good as thermometers down to the freezing point, the leaves presenting different appearances at different degrees under fifty. In the upper ranges they will recover with proper attention and increased warmth within seventy-five degrees, but if touched by actual frost they are doomed to perish. For winter culture, cuttings should be taken in August and set in any shady situation in any soil or in sand, when they will strike root by simply watering them every evening in hot, dry weather. When sufficiently rooted, they should be potted and taken indoors before the approach of early frost. If It is useless to attempt their cultivation where the temperature falls below fifty-five degrees. $35^{6}$

$$
C R A P E ~ M Y R T L E
$$



NHEREVER there exists a true love of flowers, this member of the Loosestrife family is nccessarily popular. Its bright, deep-green, glossy leaves, like those of the Myrtle, give rise to the second part of the name, though there is no relationship between the two families. It is called Crape from a loose resemblance between the blossoms, when seen at a distance, and a bunch of red or white crape.
These flowers grow in large clusters or panicles, of which there are sometimes several hundred to a plant, and continue in bloom until nipped by the early frost, the first bloom varying with the latitude in which grown, from May to August. Each individual hlossom presents a singular appearance, the many long, silken stamens standing apart from the rest of the flower, and the multitude of these flower:, when seen against the hackground of the leaves and sky, give the semblance, as has been said, of masses of crape thrown loosely over the plant. The branches are thin and soft when growing, and may easily be kept in place by pinching off the straggling shoots, thus securing a compact, tidy and symmetrical bush. Smaller specimens can be grown indoors for blooming in early winter, if placed in good, open sunlight. The plants intended for this purpose should be allowed to rest during the previous summer in some shady place, with only enough water supplied to keep them from dying. In northern latitudes the outdoor specimens should be transferred to some dry cellar or dark corner of any spare room, which in ordinary winters is all the protection they need. They are all the better to withstand the frost if the wood has been well ripened by withholding moisture for two or three weeks before frost, upon the first appearance of which they should be immediately housed. A rich loam, lightened with leafmold, or rather with peat, is the most favorable soil, which, during the season of growth, ought to be further enriched by plentiful supplies of liquid manure. It is propagated by new shoots, like the Abutilon.


## CROCUS.

ASILY cultivated, as it grows freely in any soil not positively.soggy, the Crocus is an admirable little bulb to bloom in early spring. After planting, the bulbs will take care of themselves if supplied with an annual dressing of manure. They should be set deeply, some three or four inches, either in groups or rows, as desired; and should not be disturbed except they appear on the surface, as sometimes happens, the cause always being the formation of the new bulb on the top of the old one. The bulbs are very cheap, and might be set abundantly. Their most appropriate use in the garden is for bordering beds of other bulbs, or they may be used with great effect in forming letters or other simple designs on the lawn. Except when a bed is wanted for other purposes, they may be planted about an inch apart; but where that is the case they can be set at a greater distance, and after the leaves

```
CULTIVATION AND ANALYSIS OF PLANTS.
```

disappear the place may be sown with annuals. For the house they may be planted in pans of sand or in any of the pretty designs manufactured for them out of terra cotta or pottery ware, and set away until they show growth. They can be put in the ground anywhere, with their accompanying pots, but should be covered up with ashes to protect them from rats and mice, as well as from the frost; or they may be stored indoors in a dark cellar or closet, being protected in the same way. About midwinter they can be removed at intervals, to insure a succession of flowering, into the house or conservatory, where they are intended to bloom. They must always be kept at low temperature until near the blooming period, for too great heat lengthens and weakens the stem. They also bloom in water, in small glasses adapted to them, made on the same principle as Hyacinth glasses. Bulbs should be set in the fall. They can be raised from seeds, blooming in three years, that being the average for most kinds of bulbs. All Crocus bulbs should be set about the last of October, or early in November.


## $C Y C L A M E N$.

ERHAPS there are but few plants for fall, winter and spring cultivation that will afford more pleasure to the industrious and watchful amateur than this attractive little plant. It never grows more than six or eight inches high, but it has beautiful mottled leaves, and the flowers, which are borne on single stems, have a velvety center encircled by rays of a purplish red; and in some varieties lilac and white, while in a few they approach a maroon. These ray-like petals turn down, as in the Dodecatheon Meadia or Shooting Star, sometimes called the Prairie Pointer. The bulbs should be obtained as early as possible in the autumn, so that they can be planted at intervals to promote an orderly succession in their periods of blooming; or, they may be planted all at once, but treated with different degrees of heat, water, and other attentions, to hasten or retard their development. The plumper ones should be preferred; but if shriveled ones only can be had, they may be freshened by being enveloped in damp moss or cotton batting for one or more days. They delight in a good, rich soil, in which they are planted so as to leave about one-fourth of an inch of their substance above the surface. The soil should receive a little water, and the pot be put away in a sheltered place with a northern aspect, or under a tree, until they begin to grow, giving a little moisture as required. When the leaves begin to start, the plants can be brought forward to the light and given all the air possible every day, with water when necessary, care being taken that they do not decay through being too abundantly supplied. After their blooming season is over, the watering should be gradually reduced as the foliage withers, and finally almost discontinued. They are then put away in a shady, airy situation, free from rain, yet where the soil will not at any time become actually dry; but if there is any danger of such a contingency, a little water around the bulb might be given, as it must on no account be allowed to decline from its plump condition. In the fall they should have the soil shaken from them, and be placed

```
`\LTCLRE OF F&YORITE PLANTS:
```

in a fresh, rich eompost. The larger bulbs often produce as many as two hundred flowers. The withered flowers should be clipped off, unless seed is desired; of those left for seed the stem will eurl until the seed vessel is drawn down into the soil, where they ripen. Propagation otherwise than by seed is ordinarily impracticable with this bulb, as its solid nature almost precludes its division, and only the skilled practitioner can hope for success. When grown from seed it takes three years to bloom, unless specially petted and fostered by some skillful hand, and therefore most amateurs prefer to purchase blooming bulbs. Their chief enemies are mice and excessive moisture.


## $\mathscr{T} A I S Y$.

AISY, from the Saxon, denoting day's eye, because of its hahit of opening carly in the morning, is a great favorite, as indeed it has been for ages. Whether growing by the roadside, a neglected beauty, or petted and cared for by some flower-loving cottager, its praises have long been sung by the greatest among European poets. In this country the Bellis perennis, or common double European Daisy, is extensively cultivated as a choice exotic; while the whole-leaved species, or B. integrifolia, is indigenous from Kentucky southward to the Gulf of Mexico. A heavy clay soil seems to be the natural choice of these simple beauties, but they will grow in almost any soil if supplied freely with water. In shaded nooks they will retain their flowers a long time, but the direct rays of the sun cause them to prematurely drop both flowers and leaves. The flower of the Daisy in the natural state is single, and borne on the top of a long, slender flower-stalk; hut by cultivation it has become double, and has eren sported into several curious and beautiful multiplex varieties. They have, however, seen their greatest popularity in this country. They can be cultivated in and out of doors, but as house plants must have all the light possible in the winter montbs. They are easily propagated by divisions of the plant, early in September in northern latitudes, the parts thus separated being set two or three inches apart in a sandy loam, with an eastern aspect. They should be protected from a too beavy drenching by rain or otherwise, and for this purpose a gentle, eastward slope is the best site. On the approach of regular frosty weather, they should be covered with a layer of leaves to about six inches in depth, protected by branches of trees from being blown away. When the weather is mild, this covering should be raked off for half a day, and restored before the approach of the night chill, a few times through the winter. Many are kept in garden frames, with only one inch of leaves.

As has been intimated, there are several varieties in cultivation, a favorite one being known as the Hen and Chickens (scientifically B. prolifera), because of a number of miniature flowers growing around and under the protection of the larger flower. Upon the whole, in the hot, dry elimate of this country, the Daisy, in the estimation of some intelligent amateurs, is very unsatisfactory for outdoor cultivation.

growth is readily appropriated by this thirsty plant, which also revels in a warm atmosphere. It is usually propagated by florists from sections of the root, as already described under Bouvardia and elsewhere. It may, however, be rooted from small offshoots that grow on the side of the stem; and also from seeds, but this last method is rarely followed.


## $E C I E V E K I A$.

 on rockwork and on high, sandy ground; as also sometimes for low edgings of beds and walks. Some of them look not unlike old, rusty iron; others have bluish-green leaves; and one variety, called the E. rotundifolia, or round-leaved, makes an elegant vase plant to surmount a pillar or parlor-stand. Being of the very easiest culture, almost anyone can cultivate them in nearly every condition of soil or climate; but an excess of water in cold weather will prove fatal. Some of the species flourish through the winter, sending out spike-like racemes, two or three feet in length, of a very waxy, flesh-colored appearance, which remain a long time on the stems. Other low-growing species have bright yellow flowers, after the manner of the Mossy Sedum or Wall-Pepper. They luxuriate in a loose, sandy soil, containing some leaf-mold, and though not dependent on a rigid regularity in the water supply, they should not be entirely neglected during the growing season. Side-shoots, or even the flower-stems, can be made the means of propagation, being set in clean sand and sparingly watered until rooted.

## $E R Y T H R I N A$.



## FUCHSIA.

WINGING bells and neat, glossy foliage mark the Fuchsia, which has for many years formed one of the most attractive of plants for both greenhouse and parlor culture. Dryness of the atmosphere, one great cause of failure, can be obviated by sprinkling in the summer, and a vessel of water on the stove in winter. Buds drop from several causes, the fault above mentioned being one, and from the two extremes of keeping the roots either too dry or too wet. In summer, when in bloom, it would be advisable to water the plants twice a day if the pot is pretty full of roots and the shrub of fair size. This should be thoroughly done, but on no account should the plant be allowed to stand in a saucer of water. This advice presupposes an open soil and free drainage. After the flowering is over, water should be given more sparingly - about twice a week - as growth at this season (except in the winter-flowering varieties) should not be encouraged. They can be wintered in any common cellar, free from frost. Among the best varieties for indoor blooming in winter are the F. speciosa, the F. serratifolia multiflora and the Rose of Castile. For outdoor blooming they require a partially shaded situation, under trees or arbors or in the vicinity of other bushes; though when planted they will bloom in a sunny place also, but not so well.

Fuchsias are propagated from slips, and when required for large plants should be kept continually growing, shifting into the next size larger pots as soon as the roots touch the sides, until they reach the largest size, when they should be transplanted into boxes or tubs, where they may be left for many years, giving them an annual top-dressing of cowmanure, and frequent applications of liquid manure during the season of growth. They can also be grown from the seed, sometimes giving new varieties. The rule for soil is one part each of loam, leaf-mold and cow-manure; but for a fine specimen plant it should be at least one-half cow-manure.


## FUNKIA.

REAT numbers of people know this species of the Liliaceous family under the more common title of the Day Lily, though it is easily distinguishable from the Hemerocallis, or common Day Lily, both in the leaf and flower. The leaves of the Funkia are obovate, while those of the Hemerocallis are a broadish linear; the flowers of the latter are a light yellow, and those of the Funkia a bluish white, and somewhat smaller, with a tubular shape. Another difference easy to be observed is that the Funkia blooms from July to September, while the other is earlier. The botanic name, given in honor of a German botanist, has not quite universally replaced the older name in popular acceptance, and the delay has occasioned some little confusion in the minds of many amateurs. The Funkia, which is fast becoming recognized as the true Day Lily, is from df China and Japan. Its finest species, the F. subcordata, or Japonica of the catalogues, the
favorite old white Day Lily of the gardens, is a beautiful border plant and perfectly hardy. The fine heart-shaped leaves of the Funkia are always pretty from their first sprouting until they fall; and the plants are well adapted to fill an unsightly waste place, as their habit is so cosmopolitan that they will grow in any soil, though they are by no means indifferent to a rich one. The rich, pearly and very fragrant trumpet-shaped flower, which survives only for a day, but is promptly followed by its fellows, is a great favorite wherever known, and amply compensates for the little care it requires in cultivation. In hardy and cold-enduring properties the Funkias are excelled by but few plants, enduring the winters of even our northern latitudes without injury. Grown easily out of doors, under trees or in open beds, no collection should be considered complete without them. As house plants the smaller variegated sorts are much used, and under such favorable circumstances these often anticipate their season of flowering. For the embellishment of cemeteries, public parks and other places not receiving close attention, they have been found very acceptable, withstanding privation and neglect better than most cultivated plants. They are usually propagated from divisions of the roots, which grow in large masses, and are easily separated, either while the plant is dormant-that being the best time - or while in bloom. The method is the same as in the Dicentra.


Q HENCE sprang the error that confounds the Gardenia with the Cape Jasmine it is somewhat difficult to conjecture, as they resemble each other only in the odor they emit, and even belong to different families, the Gardenia being a Madder. They have been known in cultivation under this name (given them by Linnæus in honor of his correspondent and friend, Dr. Alexander Garden, of Charleston, South Carolina) at least one hundred and twenty years; how much longer under their former name it is difficult to say. It is a very fine, robust, ornamental shrub, with thickish, glossy leaves of an oblong or elliptical form; and produces large, loose masses of double flowers. The G. camelliflora has a large donble flower not unlike a medium sized Camellia, hence the name of the species. All the Gardenias delight in a rich soil, composed, in equal parts, of leaf-mold, old cow-manure and good loam; and, except when dormant, in abundant moisture, which, however, should not be suffered to become stagnant. It is important, and even necessary to their well-being, that they be kept clean; and hence, if syringing be found insufficient, the sponge should be cautiously and gently applied, the hand supporting each leaf while it is being washed. They will give an abundance of white flowers during the winter when properly cared for and supplied with the necessary warmth, which should not be less than sixty-five degrees. In even the coldest sections of our country they can be put out of doors in the summer, and allowed to rest for one or two months, when, if desired, it can be started to grow again by the free application of water. It is propagated by cuttings of the young side-shoots, which should be treated in the usual way already mentioned under Abutilon;
but very rarely from seeds, as it is too slow a process, requiring three or four years to obtain a good specimen. They are easily cultivated as house plants, and are recommended to amateurs as choice beauties, well worthy of their attention.


$$
G E R A N I U M
$$

Geranium in all its varieties is one of the most satisfactory among house-plants, being admirably adapted for either window, parlor, greenhouse or garden culture. They run through various shades of color. Of the reds, the deep or blood tints are much handsomer than the paler or orange reds, and the pink and white are both delicate and pure. The double ones do not drop their petals like the single ones, yet some of the single ones hold their own well, and bear very broad trusses. The single white are many times very fickle, scarce holding the first flower until the seeond unclasps, whieh is very provoking if a full cluster for a bouquet is desired. It is well to make this inquiry when purchasing plants, for where there is a difference the labor might as well be expended on those that will give the most lasting pleasure. We have one plant, a deep cherry color, that holds its blossoms nearly a month, with from thirty to forty florets in a truss. Geraniums are rather herbaceous in growth, their stems being a grayish green, and but slightly woody. When grown in the house during summer they should be given plenty of air to ripen their stalks, as they withstand the cold better. Those that blossomed in summer can be buried in a dry pit and covered with a foot of leaves, or kept in the cellar in an entirely dark place, free fiom frost, and require little or no water; We say entirely dark, as in a partial light they develop a useless, spindling growth. They can also be wintered at a window, if the space is not wanted for blooming other plants, the watering being governed by their needs. For future outdoor decoration large plants may be pulled up by the roots, the loose soil shaken off, the green wood and leaves trimmed back to the ripe wood, and the green cuts earefully powdered with charcoal and air-slacked lime, when the whole may be hung up in a dark place free from frost. In the spring the plants should be withdrawn from their retreat, trimmed back considerably, repotted if necessary, and given a little speeial attention, when they will very soon grow.

Geraniums are among the easiest plants to slip. They must have two joints at least, and three would be better, the cutting being just at the third. They are less apt to damp or rot off if laid aside for two or three days in the shade before planting, as hy that time the broken end heals over, or forms a scar, which prevents the sap from escaping. They are then ready for planting. Many, however, put them down entirely fresh. Some kinds can also be started in wet sand, and set on the window-sill in the sun, in which case the sand must be kept always sopping wet, like mud, the slips being potted as soon as the roots are assured; but the fleshy, succulent varieties require less water. They can also be rooted in soil. For ourselves, not wanting many at a time, we stick them down in pots of our large plants, close to the side of the pot, where the slope of the
crock gives them sufficient drainage，and the heat it draws from the air furnishes all the warmth required．When raised from seed，the long spur attached should be cut off，as it is likely to work the seed out of the ground．

Most of the Geraniums have strong－scented foliage，and are quite free from insects． The Rose Geranium，with its lemon－scented leaves，is，however，an exception，as the aphis or green－fly considers its green shoots a dainty bit．The Apple，Nutmeg and Pennyroyal Geraniums are grown for their fragrant leaves，and are well adapted for hanging－baskets， but are better for pot culture．

Geraniums require a rich，loamy soil．To have them bloom in winter，they must not be allowed to bloom during summer，and should be kept with a scanty supply of water． In early fall repot and trim back well，give more water，and occasionally liquid manure， and the branches will probably give flowers by December．


## $G 工 A D I O L U S$.

ESERVEDLY among the most popular of bulbous plants，the Gladiolus will always repay，by its abundance of flowers，for the care and attention bestowed upon it．In modern times it has been so extensively hybridized that the varieties now number several hun－ dreds，and are in a fair way of being swelled to thousands．By this process，however，they have been made less hardy，and the new speci－ mens require more careful handling than the old．All the varieties will grow in almost any soil，the richer earth，however，in every instance producing the better flowers．The spot selected should be enriched with good manure，which should be thoroughly incorporated with the soil．The bulbs should be planted three to six inches deep，according to size（bulblets only one inch），and four to six inches or more apart，and abundantly watered in dry weather．Supports should be furnished each plant，if in a windy situation，to keep the flower－stalks upright．However small the collection，it will be found most agreeable to have a number of varieties，as by this means a pleasing continuity in the times of blooming is most readily insured．Other plants may be grown in the same beds，provided they are a low－growing kind，as for instance the Mignonette；the shade or protection afforded by the leaves of such seems to be beneficial to the bulbs during the process of growth；and they also help to relieve the scarcity of foliage in the slim，gaint Gladiolus．As window or house plants they are scarcely desirable，requiring too much root－room，and not possessing any compensating peculiarities of foliage or even of flower．They propagate themselves by forming new bulbs upon the older ones，and a number of bulblets under the new bulb．These bulblets should be planted in beds by themselves，as they have to be grown from two to four years before flowering．They should not be planted，however， until they have been kept eighteen months，as if started sooner very few of them will grow．The bulblets invariably produce the same variety as the parent．When the flower－stalks are dead，or after the first light frost，the bulbs should be lifted，and such as
may be unripe allowed to dry in some airy place, when they may all be trimmed of the spent roots and leaves, and stored away where they will not mildew from moisture or suffer from frost. The Gladiolus is the finest cut flower in existence. The spike placed in " vase, after the first flower has expanded, will develop and open every bud, and grow more delicate and beautiful to the last.


## HELIOTROPE.

MONG the favorite plants for window culture, and one of the most desirable for the greenhouse, is the Heliotrope; and this on account of its clusters of vanilla-scented flowers, which are the various shades of lavender or purple, and are in great request for cut-flower decorations and bouquets. If we might be allowed the expression we should call it one of the most quick-tempered of plants, pouting and petulant, to be led coyly along as if not being led, or else given its own way, when it will grow gloriously. It is quite susceptible to a change of atmosphere. A plant brought from the greenhouse should be watched that it get not too dry in the soil, which will
be when it looks very dry on the surface, or else the leaves will begin to turn yellow or brown, and in a few days will drop. We have sometimes turned the balls of earth out on our hand, and found the fine rootlets, that should be like white silk and full of life, one brown, decaying mass, rendered so by the withholden cup of water on the one hand, and on the other by the porousness of the pot, that had withdrawn what moisture they derived from the soil. All this dead substance should be picked off gently, and the plant replaced in the pot; when, with a little more attention, it will begin to grow again, having become accustomed to its surroundings.

When placed in the ground in summer the Heliotrope grows finely, but is very impatient of removal, as the lifting disturbs the roots too much. Those who wish a choice specimen saved should secure slips from it first, and get them rooted; then they will not be entirely helpless in case of failure in removing the plant. In taking up a large plant the following directions may be observed: Cut the roots all round the plant, so that the ball of soil will be a little less than the pot or box it is intended to grow it in; let the cutting be done with a very sharp knife or spade, and after the cutting let the plant remain in the ground for six or eight days. When ready to transfer, lift the plant as gently an possible from the ground with something broad enough not to disturb the roots, and place it in the pot; put this in an entirely dark place for a few days, giving no water at first (as the soil should be in a condition not to require it), watching to see when it begins to revive, then gradually move it to the light and trim it back. The foliage will probably fall, but if successful it will start again.

The Heliotrope, to be a fine plant, should be allowed to grow large, and then it would be nearly always covered with flowers. A tub or box is the best place for this plant. For a window, one the size of a butter firkin answers. Indeed, a firkin itself could be used by washing it free from grease, and then soaking out the salt which it has
absorbed from the brine. A few holes bored in the hottom would let out all the surplus water, and a coat of stone color, drab or white paint would make its exterior presentable. No one growing the Heliotrope only in small pots can know the pleasure of growing it as a large bush, and pruning it when too rampant. In summer a plant so grown could be placed out of doors to adorn the yard or lawn. The soil recommended is three parts loam, and one part each of leaf-mold, sand and manure. If kept constantly growing it blooms the whole year, its wood becoming quite hard and shrubby. Arrived at this condition, it. can be kept for many years in a productive state, by an annual top-dressing, and liberal weekly supplies of liquid manure. It has been known to live for twenty years undisturbed in a sunny corner of a conservatory; it requires warmth in winter, as it cannot stand any frost. The pale varieties develop a larger growth of flowers and are more fragrant than the dark ones. A good way to propagate Heliotropes is to take two-inch cuttings of new shoots, pinching off the bottom leaf, when the slips are inserted in pans of sand and water, and kept abundantly moistened until they show new rootlets or begin to grow. This process is most successfully carried out in summer, or in a temperature of at least seventy degrees; if the heat rise above eighty or fall below fifty the slips will usually fail to strike root.


## HIBISCUS.

NDER this name are included many lovely species of the Mallow family, and all of them are general favorites with both amateur and professional culturists, for house or garden purposes. Their popularity is not of yesterday, but dates far back into the olden times, being known to Pliny (who recommended the Hibiscus for certain medicinal properties in healing ulcers), and bids fair to survive throughout all time. Apart from all useful qualities, medicinal or other, it commends itself for the large, rose-like and very showy flowers, sometimes four or five inches in diameter, which it produces in rather compact clusters on slender and graceful stems. The beautiful, brilliant red of the flowers make the plant conspicuous at a considerable distance, and cannot fail to attract the attention of the most casual beholder. The leaves, which are large, long and somewhat egg-shaped, but sharp-pointed, are always pretty, more especially the variegated kinds, as they hang gracefully drooping around the upright stems. It is familiarly called the Rose of China, but is really indigenous in several other countries, including the United States. Easy of cultivation, it can be kept in good shape by pinching, and its more compact growth will remunerate the cultivator. A soil composed of equal parts of leaf-mold, loam and manure is the best adapted for it; and, like the Abutilon, being a gross feeder, it should receive during the growing season an abundant supply of water and liquid manure. It is mainly propagated from cuttings of the young shoots, and but rarely from seeds. In the summer months it should be plunged, with or without its pot, in some spare bed or border, to take the necessary rest; though it can be made to grow and bloom all the year round by an extra allowance of stimulating liquid manure and free watering.

## HOYA.

the Hoyas, or Wax-plants, there are three or four common species, all of them very beautiful. They are mostly woody vines of a scandent or climbing nature, with waxy, ovate leaves; and, though properly belonging to the hothouse, can be grown with the greatest ease as parlor plants, always with the understanding that warmth must be supplied in winter, and that they be kept free from frost. Of course, the blossoms must not be expected to appear as abundantly as when placed in a higher and moister temperature, but, should they utterly refuse to bloom, the beauty of the foliage would amply compensate for the little care they require. They can, however, be almost always made to bloom by withholding the usual water supply, and suffering them to become partially dry for several weeks. The flowers are most exquisitely beautiful, the clusters being composed of from fifteen to twenty florets arranged in the form of a simple umbel. Each floret is in the shape of a five-pointed star, with the points slightly recurved. The texture is like wax, with a rather plushy surface. The buds open always in the evening, and all at one time, as if by electricity, so sudden is the transition from bud to blossom. When plants are well established they grow freely and rapidly, if not neglected in the matter of a judicious application of water to leaf and root. One in our own collection (the Hoya carnosa), in a twelve-inch pot, makes each season vines about eight feet long, and blooms very freely in a common sitting-room with a southern aspect.

We would advise our readers, however, to secure good-sized plants in the first place, those with old flower stems or buds, if possible; for, though growing readily from slips, they are many times very perverse in starting runners, often remaining stationary for a provokingly long time. The flower or bud stems come from the axils of the leaves, generally at every alternate joint of the young growth, forming one year and blooming the next, and from that on, season after season, though sometimes skipping. Occasionally buds come from the old wood. of the vines as well. These dark or woody flower-stems should never be cut off, as there is always a central or live tip for future bloom, and the apparent unsightliness is amply compensated for by their superior flowers.

The best soil is said to be three parts loam, two parts leaf-mold, and one part sand, with a little broken charcoal. It should be light and open, with good drainage. The repotting should be done in spring, just as soon as the plant begins to grow, and the plant thoroughly watered; after which water should be withheld a week or more until new roots begin to form. When in a large pot they need not be disturbed every year. In summer they should be watered when the earth is dry on the surface; in winter, once a week, or less often, will do. During the growing season the plant should have a watering of liquid manure, not very strong, once or twice a week.

In propagating, the slips should be laid aside a day or two, until the sap closes the wound. The cuttings should then be placed near the sides of the crock, and started, if possible, in a gentle heat. The leaves also answer as slips. The only insect we- have seen on them is the mealy bug, which with a little care is easily kept under. In sitting rooms the foliage and stems will require washing occasionally to remove the dust.

```
CULTIVATION AND NNALISIS OF PLANTS.
```

Placing these plants out of doors retards or destroys the bloom, unless properly shaded, as the strong sun sears and turns the leaves yellow, from which they never recover; even in the house a thin shade is of service at midday if near the glass. We think, except in tropical climates, that they should not go out at all, as they can be given all the necessary air from open windows.


## HYACINTH.

YACINTHS are among the first plants to make their appearance out of doors in spring, and gladden the earth with their bright bloom. In preparing a bed or box for the bulbs, special care should be exercised, as their fleshy substance renders them an easy prey to disease, and subjects them to the attacks of rats, mice and other enemies. The best soil for them is a very sandy loam well mixed with good leafmold and old cow-manure. They should be set in rows, a few inches apart each way, and then covered three or four inches deep with the soil. A handful of sand placed under each bulb will help to prevent decay. The season of planting is from the middle of October to the same time in November. After they have ceanced to bloom, and their leaves have decayed or died down to the surface, the bulbs should be taken up and placed in some shady spot to dry, when they should be stored away in an airy situation until again required for planting. These plants are also adapted to pot culture, and can be grown singly, or two or three of different color, in a crock five or six inches wide. A piece of broken crockery or the like is placed over the hole for drainage; a little old cow-manure is laid thereon, and then the pot is filled, within an inch of the top, with the soil above indicated as best for Hyacinths. Finally the bulb is placed in the soil, with about one-half uncovered. The usual treatment for bulbous plants, as already given under Crocus, is then followed. Hyacinths can be grown in sand, and also in water. In sand they are placed in a proper receptacle and set away as above, the sand being kept merely moist. When the rootlets have got a good start, the leaves will begin to appear, showing that it is time to bring them forward to the light. In regular Hyacinth glasses there is generally a rim or shallow cup for the bulb to rest in. The glass is then filled with rainwater so as almost to touch the base of the bulb. The water should be kept pure by inserting a piece of charcoal and by being changed weekly. The glasses should be put away for about a month in some cool dark place, when they will have rooted sufficiently to be brought forward into the light to finish growth. The single-flowered varietice are the best for glass culture. Hyacinths that have flowered in pots or glasses are afterward fit only for planting in beds or borders. The Hollanders make a specialty of raising Hyacinth bulbs, and have produced and named two thousand distinct varietics, which they supply in immense quantities to the markets of the world. It may be imagined how gorgeous an appearance is often presented in the Netherlands by a twenty-acre lot, or more, wholly planted in Hyacinths; and the fragrance is said to bave been noticed fifty miles at sea.


LIBONIA.
AT and modest in flower, and not without some claim to a subdued magnificence, this lovely member of the Figwort family is of comparatively recent introduction from Japan. The favorite species is clenominated $L$. floribunda, from its free flowering hahit, often almost hidling its foliage under the wealth of its blossoms. The color, which is most frequently an orange or pure yellow on the under vide, but shading upward to a scarlet or deep, velvety crimson on the npper side of the flower, contrasts finely with the light green foliage of the plant. It is a slender-branched plant and of a tidy, compact growth; it can be formed into the resemblance of a ball encircling and entirely hiding the pot in which it grows, making it a very desirable house ornament. The soil in which it can be hent grown would comprise, in about equal parts, sand, leaf-mold, loam and manure. The Libonia delights in plenty of pot-room, water and liquid manure in the growing and flowering season, but abhors stagnant moisture, and therefore should receive its supplies in limited but repeated quantities. It blooms from December to May, after which time it should be placed out of doors in some partially shaded situation. It is most frequently propagated from cuttings about an inch long taken from the young shoots. It can be raised from seed if sown early, and will flower the season following.

In those sections of our country where there is little or no frost, it makes a very fine ornamental plant for outdoor cultivation, either to stand alone or to be grown as a border plant. It is not quite hardy enough to withstand our northern winters, though it will bear considerable cold, and blooms well in about sixty degrees of heat. The beauty of the plant in flower, and the ease with which it may be cultivated, should render it a more general favorite than it has yet become.


## IILY.

OR outdoor culture these bulbs require a good, sandy loam, which should be dug to a depth say of eighteen inches, and well worked; the Japanese, Chinese, and a few other species do best in a clay loam. The bulbs ought to be set five or six inches deep and left undisturbed for several years, as they thrive much better and give more bloom. Stable manure, until thoroughly clecayed, or any other fermenting material, is ohnoxious to them, hut leat-mold or plenty of good, old cowmanure would be a wholesome enrichment. In removing, it is best to keep them out of the ground as"short a time as possible; and if bulbs received from seedsmen are in a shriveled state, a wrapping of moss, or cotton slightly dampened, for two or three clays before planting, would freshen them unless past redemption. Many of the choicer variety of Lilies are grown an house plants in cities by those who have no gardens. A good soil for their growth comprises equal parts of loam and peat, or leaf-
mold, with which should be incorporated a small quantity of coarse, clean sand. The bulbs are placed a little below the surface of the soil, which should be pressed firmly around them. They are then stored in a cool, shady place where there is no wet, and only enough water given them to slightly moisten the earth until they begin to show growth, when they should receive a liberal supply. The stalks grow from two to three feet, and occasionally much higher, requiring to be propped up with stakes. When in bloom they thrive best in a dry, airy place, as they are liable to contract spots from dampness. After the growing season is over, the quantity of water must be diminished until the stalk dies down, when the bulb should be taken from the old earth and repotted directly in fresh soil, as they thus give finer bloom the next season. Several plants can be put in an extra-sized pot, but for a single bulb a six-inch one is the size.



## LINARIA.

INARIA cymbalaria, or cymbal-like Toad-flax, is a low-trailing plant of the Figwort family, with Ivy-like leaves, much used for hanging baskets, rockwork and pot culture. It is commonly called Kenilworth Ivy, because of the great quantities to be found amid the ruins of the famous castle of that name near Warwick, England, immortalized by Si . Walter Scott. It is a very easy plant to cultivate, in or out of doors, as it will grow in almost any soil; though like all plants it has a preference, and will grow best in a light soil composed of about equal parts of leaf-mold, loam and sand, with a slight admixture of manure. But whatever the soil, it must have abundant moisture, and it will not disdain an occasional feast of liquid manure. It also delights in a moderate shade, which can easily be provided by planting it among taller-growing plants, in some shady recess, or on the north side of a house, fence or tree. As its free growing habit gives it a tendency to straggle, if space be limited it must of course be kept in place by frequent clippings or pegging back. It will also crowd out small plants if not kept within bounds, but with plenty of room it may be allowed free scope, under which conditions it presents a beautiful, compact mass of foliage, interspersed with numerous small, bluish flowers, not unlike those of the Snapdragon, to which it is related. It is easily propagated by divisions of the roots. Another species, known as the L. vulgaris, or familiarly as the Butter-andEggs, is well worthy of a nook in any garden, being hardy and easy of cultivation, and also quite pretty with its wealth of beautiful, yellow flowers. This has underground stems or rhizomas, and propagates itself by what may be termed natural layering, sending in various directions its offshoots, any one of which can be made the germ of a new plant.


## MAHERNIA.

NOWN to science as a member of the Sterculia family, which very closely resembles the Mallows in mucilaginous properties, the Mahernia is a pretty little shrub growing from eighteen to twenty-four inches in height. It is a native of the Cape of Good Hope, and with careful cultivation and a fair share of sunshine it will produce an abundance of sweet-scented, yellow, cup-like flowers during the whole winter and spiring. The branches are slender and the leaves laciniate, or lightly slashed, and small, making a pretty mass of foliage if well kept in by pinching or tying back. It delights in a free exposure to the atmosphere, provided this is not excessively cold, and its favorite normal temperature would be somewhere from sixty to seventy degrees, though it will not suffer from the heat unless this ascend to the nineties. It should not, therefore, be crowded out or even shadowed by other plants, but be given plenty of room for roots and branches. The best soil for the Mahernia is, two parts of leaf-mold, one of common earth, one of cow-
manure, and one of sand. Cold moisture is pernicious to its roots, as is lime-water also; pure rainwater, "little and often," is the best prescription, as the leaves of the plant will curl up and become sickly if overdosed. It strikes root easily throngh small cuttings, say an inch long, from young shoots, bedded in clean sand about half their length, the leaves being carefully removed from the embedded part. After they have ceased flowering in the house they should be removed in the spring, for their season of rest, to the north of a fence or some low evergreen, as in that condition they delight in a partial shade. The species generally recommended to amateur culturists is the M. odorata, which is the most sweetly scented, as its name implies; but there are several other varieties also well worthy of attention. The Hector has orange, and the Diana pink, flowers; and both are pretty, highly ornamental and easily manageable shrubs, which will give good satisfaction, though not so fragrant as the M. odorata.

$O L E A N D E R$.
REATLY admired for the beauty of its bloom, this plant is scientifically termed Nerium, from the Greek neros, humid, because of its love of moisture. The familiar name Oleander is a corruption, as is generally supposed, of the word Rhododendron, or Rose-tree, from the similarity between its flowers and the smaller Roses. It enjoys a very peculiar protection apparently against the sun's rays, in a triple coat of mail or threc-fold epidermis, which is common to but very few other plants. A native of the Levant, it is found on the banks of the sacred Jordan, as well as along other water-courses and muddy bottom-lands, where there is a considerable accumulation of decayed vegetable matter. This, by the usual rule of making artificial conditions approach as nearly as may be to natural surroundings, suggests the value of peat-earth, leaf-mold, turfy loam or similar soils for their successful cultivation. Water in abundance, and unstinted supplies of liquid manure, as a substitute for the wet and decaying vegetable wreck to which they are naturally accustomed, are also implied, and experimentally ascertained, to be necessary to their fullest development. In early summer they should be moved outdoors in northern latitudes, and placed in some bed or border made up of the compost indicated, and freely manured, when they will hloom abundantly, and better reward the cultivator than if kept after the usual old-fashioned method in tubs or boxes. Toward the close of summer, in order to ripen the wood of the Oleanders, the supply of water should be considerably curtailed, but not so as to allow the soil to go entirely dust-dry. Great care should be taken in this respect, as these plants are slow to show injury, on account of the extra epidermis, and therefore nothing should be left to chance. Oleanders are propagated freely from slips or cuttings in the usual way, or by cuttings thrust into bottles or other convenient vessels containing weak soapsuds or even common rainwater. In making these cuttings, which ought to be from two to four inches long, the adhering leaves should be shortened or cut back onehalf. Layering can also be used, though it is not found so convenient; and they can of course be raised from the seed, flowering the second season.

## $\mathscr{T} A N S Y$.



IOLA tricolor, from the triple color of the blossoms, is the scientific name of the Pansy, which itself seems to have been derived from the French pensee, a thought, from its habit of hanging its head as if in a pensive or thoughtful attitude. They are among our earliest spring flowers, and are sometimes forced in hotbeds for market long before the grass makes its appearance. They are sold in pots to decorate window boxes, but in the house they do well only for a short time, as their juicy leaves soon become feasting fields for the green$\mathrm{H}_{\mathrm{y}}$, which is very hard to subdue on these dwarf plants. To be at all successfuil they must have all the air that can be admitted, and not too much sun. To propagate from seed for spring blooming, they should be sown late in August or early in September; for midsummer and fall blooming, they should be sown in spring. To produce large flowers they require a rieh soil and a partially shaded situation where they will escape the noonday heat and receive a few hours of the morning or afternoon rays. They may be increased or propagated by cuttings, layers, or divisions of the root. Cuttings are taken about the second spring or fall month. These are much better than the older plants, which are usually woody and hollow, and are best rooted in light, sandy soil in a shady place, being covered with a bell-glass or oiled paper. They should be set an inch or more deep, with the earth firmly placed around them. The varicties are numerous, amounting to several hundred. Seeds should be sown soon after gathering, as they deteriorate in keeping. Layering is done as deseribed elsewhere.


The Pelargoniums are natives of the Cape of Good Hope, and, like other floral importations from that region, are almost hardy enough to endure our severe northern winters. Though they are easy of cultivation, it is better to secure good, tree-like plants, with thick and stout young shoots. After the flowering season is over, ripen the young wood by withholding the water supply; and in the fall prune back to the ripe wood, leaving only two or three eyes to each branch, always preserving the symmetry of the bush. At a window they need turning, as do all plants, to keep them from being one-sided. They should be repotted once or more, according to circumstances, every season in very rich earth, and given larger pots as the plants increase; and the larger and more bushy they are, the better and the more flowers they have. They are most acceptable for groupings and combinations of all kinds, the richness and variety of coloring lending them a peculiar attractiveness as house and conservatory plants, furnishing material for bouquets that cannot be surpassed in richness and beauty. Though, like so many other favorite flowers, they have probably passed beyond their period of greatest popularity, they can never fail entirely to be cherished by the lovers of choice plants.

The method of propagation is to take side-shoots about three joints in length, the bottom joint being fully ripened, and cut clean and smooth underneath, while a portion of each leaf should also be trimmed off. They can be wintered in a cellar, the roots being kept nearly dry.


## $\mathscr{P} E P E R O M I A$

UPERB among the Reseda family for the beautiful markings of the leaves, together with its magnificent habit of growth, the Peperomia is worthy of a place in every collection, whether within cloors or out. It delights to grow in a still, warm atmosphere with abundance of moisture, as in a Wardian case, or in some shady nook of the house or garden. There are several varieties that have attained a well-deserved popularity as ornamental plants because of their foliage. They are natives of Brazil, and require semi-tropical surroundings, or a heat of at least sixty-five degrees. A compost made of two parts peat, or bog-earth, one of loam and one of sand, mixed with bits of charcoal or potsherds, forms a congenial soil for their growth. The Peperomias are low-trailing plants, spreading out laterally and striking fresh roots at each joint of their side-shoots. They can easily be propagated by cuttings of these shoots, as they are already provided with rootlets. Combined with Selaginellas, they produce a nice effect by the contrast of their broad, ovate leaves with the narrow, pinnate leaves of the other, an effect which is much enhanced by their peculiar markings. In some these consist of beautiful, grayish-white streaks along the lines of the nerves; in others these streaks are of a reddish tint; while in a few the streaks are replaced by silvery blotches of irregular shapes. These plants should always be watered with tepid rainwater, and by sprinkling or syringing only, and never by pouring, as they insist upon a faithful imitation of the natural process.

## $\mathscr{P} E T U N I A$.

ASILY cultivated from seed, the Petunias are half-hardy perennial plants, blooming the first season, and therefore usually grown as summer annuals. They run through many shades and markings, being mottled, striped, clouded, feathered and in plain colors. The seeds are very small, and should be sown on the surface and rubbed in with the hand or be lightly covered. After the plants are up, they should be thinned out liberally, as each individual plant becomes quite large, and blooms the better for having plenty of room. If the tip of the main branch is taken off, the side branches will be more numerous, thereby giving a more liberal supply of flowers. The double ones are more often grown from cuttings or slips than from seeds. The seeds of double flowers in these plants are obtained by fructifying the pistils with the pollen from a single or semi-double flower; occasionally, however, this process will yield single flowering plants. Petunias are grown in windows and conservatories as well as gardens, especially the double varieties. A good soil for their growth may be made up of equal parts of loam, leaf-mold, good manure and sand. Petunias seed freely, and are largely self-propagating; but a few of the superior hybrids are liable to prove defective in this respect; and, to insure success in raising these fancy kinds, the simplest and best method is to invest a small amount in the seeds raised by some specialist. They will appear early in spring, but all the sooner if the beds be cleared of old flowerstems and other rubbish. A few Petunia plants will in a short time cover an area of several square yards, and they therefore furnish a cheap and easy way of floral ornamentation. In thinning out, the strongest specimens should of course be retained, and left not less than six inches apart. They bloom in the open air, in even northern latitudes, from June to frost; and in warmer climes, or raised in hotbeds or under cold-frames, the season of bloom is proportionably prolonged, being virtually all the year round.

in color from them. The various markings make these flowers to rank with the most beautiful treasures of the floral kingdom, while they are by no means deficient in fragrance.

As a low-spreading plant, the P. Drummondii is no contemptible rival to the far-famed and longer-known Verhena. It even possesses some attractions that give it a decided advantage over that popular flower; for instance, it is less subject to insects and not so dependent on moisture, though it is by no means indifferent to attention in this respect. As a plant for bedding out in large or small quantities, it can scarcely be surpassed, as it blooms early and continuously through the whole summer and fall until frost. In large masses it makes the most brilliant and at the same time the most delicate of flower-beds, while the ease with which it may be cultivated should make it everybody's flower.

For early blooming it is best to sow the seed in a shallow box only two or three inches deej, placed where the seedlings can have some protection from the occasional inclemency of the weather in early spring. It is, however, hardy, and accommodating enough to dispense with such attentions, absolutely requiring only to have its seed sown in any garden soil, but the less attention the later the flowers. It will propagate itself freely by scattering its own seed when fully ripe. To collect the seed of the P. Drummondii, it is necessary to gather the pods when a little more than balf ripe, or when they have begun to turn a yellowish brown. They should then be spread out for four or five days in some dry, airy place, to complete the ripening process. Where they are allowed to sow themselves, the ground should not be disturbed in spring, requiring only to be raked free of rubbish and overlaid with a mixture of half common earth and half manure, to the depth of about an inch. This will save considerable trouble in the matter of digging, but will be attended by some extra labor in thinning out. For those, however, who wish to make the most of the Phloxes, the best method is to sow the seed, as already recommended, every year, and dig the soil, where they are to bloom, to a spade's depth, enriching it at the same time with the best manure at hand. As house plants they are not desirable, as they show best in open beds or borders.


## QHYSTA ${ }^{\top} T H L^{\top} S$.

ENOMINATED Physianthus from two Greek words signifying nature-flower, it is difficult to determine in what respect this plant is more entitled to that name than a hundred others. The species most in cultivation is denominated P. albicans, from the Latin albico, I make white, because of its abundance of white flowers. It belongs to the Nightshade family, and is much grown as a house ornament. The white flowers, which are about an inch in diameter, grow in thick clusters in all the axils, and emit a pleasant fragrance. They are much used on public occasions, as at births, marriages and funerals, in baptismal bouquets, bridal wreaths, and mortuary chaplets. The Physianthus is a good climber, covering a window-frame in a short time, yielding itself to the owner's wishes, and readily assuming such shape as may be desired. Outdoors in warm latitudes the plants bloom freely throughout
the summer, growing into large bushes with moderate care. They delight in a rich soil composed of one part cow-manure, one loam, one leaf-mold and one sand. They also delight in abundance of water during warm weather, and plenty of room for the great masses of roots which they form. They are most usually propagated by slips of young wood, but not infrequently by laycring. This layering is of course peculiar, as these are pot plants in northern latitudes, and the process is thus: Shoots from the parent plant should be pegged down, near to a joint, in an adjoining pot full of the proper soil, but in which nothing is growing; a little damp moss, or, wanting this, a little cotton-batting kept moist and placed over the joint, will hasten the operation of rooting. They require but little rest, and will take it indifferently at any season; their accommodating babit should not, however, deprive them of due attention in this respect, as they will be all the better for one or two months' rest. They will not flourish in less than fifty-five degrees, and frost will entirely kill them. As they are liable to be infested by mealy bugs and scales, they should be syringed at least once a day in the growing season.


$$
P R I M R O \text { N゙E. }
$$

IHE Primroses are very attractive flowers in all the varieties, but those most frequent in amateur indoor cultivation are of the specics distinguished as the Chincse. These bloom most freely during the latter part of winter and through the spring, and even often into the summer. The leaves are soft and downy, sometimes nearly round, and in other plants so deeply dentate as to be called fern-leaved. The flowers are like delicate porcelain, and appear in upright clusters, each being circular, with a plain or fringed margin. The colors are white, rose, and varying shades through to crimson, with a greenish-yellow eye in the center. They can be grown from the side-shoots (used as cuttings or slips), which, when low down on the plant, start the rudiments of roots even before removal. The great trouble is that they are apt to damp off or decay at the basc before rooting. The following method we have found successful. We take the cutting as soon as severed and dust the end with powdered charcoal; we then press it against the soil, taking care not to embed it too decply, and often prop it to keep it upright; the next process is to cover it with a hell-glass or other glass shade, which is tilted slightly so as to admit fresh air. We administer a spoonful of water ahout every two days. These Primrose cuttings require a moist, still atmosphere when taking root, but shoukl they show signs of damping off, or becoming sickly, which is eridenced by the leaves becoming yellow, a little dry sand, charcoal or brickdust supplied around the base will help them. They do not thrive if too damp, as a softness or rot attacks the stalk, a fine plant often looking quite healthy at the top when it is gone past redemption just above the root. The leaves, when torn and faded, should be broken off only halfway up the stem, as otherwise the disease mentioned is sometimes prochuced. They should be kept in a shady situation, and not watered much in summer, as that is their dormant season. When the central stalk
becomes bare of leaves, the plant may be turned out of its pot and some of the lower earth removed, the plant replaced and more soil added on the surface. When grown from seeds, these should be sown on a soil of leaf-mold and manure, the surface being rather rough; a paper is then to be tied over the pot or box, and this paper only to be kept dampened. They begin to germinate in about three weeks. When they have developed two or three of their downy leaves, they may be given small pots to themselves, being transferred to larger ones as they grow. For fall blooming they should. be sown in March or April; for later flowering, during midsummer. It is better to carefully sow the seeds some distance apart, so that in transplanting each can have soil around its root.


## $\mathscr{R} O S E$.

EYOND all cavil, the Rose is entitled to the preëminence it has ever held as Queen of Flowers. The purity of her blossoms, the exquisite texture of the satin or velvet petals, with their rich hues and delicate tints, the half-pouting buds just untying their green ribbons, the perpetual incense that arises from their opening lips, charm and enchant us, subdue and conquer us, and we become most humble servitors at her throne. There are two grand divisions of Roses recognized by florists and amateurs, known as the Summer and the Perpetual Roses. The former bloom once in summer, whence the name; and under this class are included what are familiarly called June Roses, June Moss Roses and June Climbers, all of which, together with sundry allied varieties, are hardy and easy of culture. The second division are the Perpetual or Remontant Roses, under which are included Bengal, China, Tea-scented, Bourbon, and Noisette Roses. All of these flower several times in the season, and should be well trimmed back wherever they make a weak, spindling growth; the strong, healthy shoots may also with advantage be cut back one-fifth of their length.

According to their habit of growth, Roses may be described as Climbers, Half-climbers, Intermediates and Dwarfs; and these are found in each division of the Rose family. The Climbers throw out long main branches, well supplied with shorter side branches that produce the flowers, in which respect they are different from the others only in the matter of length; the Half-climbers, roughly estimating; reach about one-half, the Intermediates one-fourth, and the Dwarfs one-eighth, as high as the Climbers.

The planting of roses requires special care, and should be trusted to no slovenly hand. They will grow in any ordinary soil, but the richer it is, the finer will be the bushes and the more prolific the blossoms. The place where the plants are to be grown should be dug to the depth of a foot and a half or more, the soil turned to one side, and a good layer of broken brick, stone or coarse gravel placed in the bottom, overtopped by sods with the grassy side turned downward, to secure drainage, where such precaution is necessary; for while the rose likes plenty of water during its growing season, it much dislikes to have its roots standing in a pool, which soon shows its effects on foliage and flower. Good garden loam should be mixed with well rotted manure until thoroughly incorporated,
when the compound should be placed on top of the drainage ready for receiving the plant, the roots of which should be firmly embedded by pressing the earth about them. If the soil is very light, it will be necessary to add clay or strong clay-loam to render it more retentive of moisture. A liberal dressing of marl or blue-clay benefits all Roses. The first few rain storms should be carefully watched to see if the soil settles, as it doubtless will do somewhat into the rubbish placed for drainage, and where it does, the shrinkage should be made good by adding more loam. Top-dressing every year, and the application of liquid manure about twice a week, during summer, are beneficial.

It is only by rich feeding that the so-called Perpetual Roses will bloom more than once a season in this our dry climate. These varieties should be pruned twice a year -once in June, and again late in the fall; yet of course the pruning depends somewhat on the latitude in which they are grown. The old wood should be kept well cut out at all times, especially in house roses. Pruning in spring hastens the starting of the bucls, and should not be done too early, as a sudden frost would at once destroy all prospect of bloom.

Large trees absorb a great deal of nourishment from the soil, and consequently roses should not be planted too close to them if perfection is expected. They like fresh soil very much, and it frequently benefits pot Roses to wash the soil from their roots, giving them a new supply; but not when budded and blooming, as of course they should not be then disturbed. Roses demand deep, rich soil and plenty of sun and air, to keep them free from disease. If Roses are buclded or grafted on other roots than their own, as for instance the brier, or strong-growing wild ones, all canes coming up from the roots should be destroyed as soon as they are observed, as they would absorb much of the nutriment necessary to the well-being of the fairer plant.

The Climbers and Half-climbers are generally propagated by laycrs, and the other sorts by cuttings. These cuttings should have three or four joints of half-ripened wood, and may be made to strike root in some shady corner outdoors during summer. The Tea and China Roses, which are the most usually cultivated as house-plants, strike root well if placed along the sides of pots where other plants are growing, as in such situations they enjoy the required shade and heat. The blind shoots, that is, such as produce no flowers, are the best for cuttings in all kinds of Rose plants, as they root well and send forth strong, vigorous flower-bearing stems. If cultivated outside, the Summer Roses can be planted in spring or autumn. In extreme latitudes the plants should be drawn together and bound with straw or matting, and the climbers be laid on the ground and covered with sod, sand or manure. When laying down for winter protection, a few handfuls of soot thrown in among the shoots or on the crown is an excellent preventive against the destructiveness of rats and mice. The small Tea Roses are the ones most frequently found in window culture. The success in cultivation is varied, the heat of dry roons making them likely to be devoured by insects unless considerable care is exercised. They suffer much if their roots become dry, and die outright if kept too wet. A good way to avoid either extreme is, in potting to put some broken potsherds or charcoal in the bottom, filling in around the roots with rich soil; then place the pot into one a couple of sizes larger, and fill the space between with moss or cotton-batting. This intermediate padding should be kept always damp, thus affording the necessary moisture without excess.

## $S A X I F R A G E$.

MONG the rather extensive family of Saxifrages, perhaps the most commonly cultivated as a house plant is the S. sarmentosa, popularly known as the Beefsteak Saxifrage, and sometimes as the Strawberry Geranium. Originally introduced from- China or Japan, its hardy character adapts it to all places and all conditions of the atmosphere above the freezing point. Its leaves are very nearly heart-shaped, or approaching the kidney shape; and are thickish, slightly hairy, of a bright green on the upper surface, and a flesh or purplish-red color underneath, not unlike the Begonias. The leaves resemble a small inverted saucer in shape and size, and are often variegated along the edges, or reticulated throughout with peculiar salmoncolored markings, mixed with a yellowish-white. One of the varieties derives its distinguishing name from this feature, heing called tricolor. Most varieties of the Saxifrage are liable to run back, as florists say, to the condition of the primitive plant, a plain green on the upper surface of the leaves. It is much cultivated as a parlor ormament in a hanging-basket in combination with others, or grown by itself as a specimen plant, sending over the sides long strings of stems and leaves, which can be easily trained to completely cover the pot. The method of propagation is ordinarily by the little tufts or bunches of miniature plants that grow upon the strings or runners, or upon the sides of the old plant. These will strike root readily in any damp soil or sand, and indeed are often provided with rootlets before being separated from a parent plant. They can also be raised from seeds. These plants require an abundance of moisture, and a temperature of not less than sixty degrees. They can be easily kept green all the year round, if thought desirable, by giving them water and a shady situation in a good, rich soil, although they will accommodate themselves to a very poor one.

$S C I L I A$.
HIO and the States west and south thereof produce a species of indigenous Scilla scientifically known as the S. Fraseri, and popularly as Wild Hyacinth. The Scilla in a member of the Liliaceous family, and has been long noted for its medicinal properties under the familiar product of syrup of squills, which, however, is chiefly produced from the allied genus, Urginea Scilla. As an indoor or outdoor plant there are few bulbe that give more satisfaction in proportion to the care and time bestowed. For a small plant it is highly omamental, and is much used for edgings of boxcs or stands in parlors, or beds and border, outdoors, being very hardy and requiring little or no protection. Its pretty racemes of fine azure-blue flowers, half an inch to an inch in diameter, are very attractive, as they form a good contrast with the surrounding foliage. Among the earlitst of plants to bloom outcloors, they gladden their owners at the first disappearance
of frost, being often setn piercing through the late-lying sums. They like a good, rich soil, but will not disdain to grow in even a poor one, though of course with some prejudice to the strength and beanty of leaf and flower. The more moisture the better, provided only that it be not stagnant. In outdoor growth they may be left undisturbed for year:; and such annuals an Mignonettes, Petunias and the like, may be sown in the same beds while the Scillas are having their season of rest throughout the whole summer. They are self-propagating by the outgrowth of their tubers, or by their ripened seeds, if the soil be not too much disturbed; and can of course be propagated by the cultivator in the same way. The effect of a mass of their fowers blooming in the early spring amidst the belated snow is picturesquely beautiful; they will bloom all the earlier for having been planted in some quiet, sheltered nook. The bulbs can be taken up and cared for as in the Crocus, but it is really of no advantage, ats they will take care of themselves and do better if left undisturbed.

$S E D T^{\top} 1 /$.
OMMONLY known by the name of Wall-pepper, or Pepper-moss, the Sedum acre is a low-growing, thick-leaved plant of the Orpine family. The Sedum Sieboldii is another species of a higher growth, brought from Japan hy the eminent traveler and Japanese explorer, Dr. P. F. V on Siebold. Both are favorite rock plants, and extensively cultivated in window as well as for rock work, being of a hardy habit and requiring but little care. The S . acre is much used for edgings or borders, and withstands the frost of wen our northern latituden. Spreading broadly along the ground, and rining to a height of from one to two inches, it resembles a carpeting of mons, but ulupasses these plants in bearing a very considerable number of bright-ycllow flowers during the season of bloom. Some rocky, barren district in Europe are rendered quite picturesque by the large minnes of the Sedum that grow in the fissures and on the ledges. The S. Sieboldii is a prettier as well as a larger plant than the S acre, and its peculiar growth in pot culture renders it a more uniscral farorite. Its tems gratcefully droop over the edge of the pot to a length of from nine to fifteen inches, sending out a cluster of three roundish leaves at intervals about an inch apart along the whole length, and producing a terminal cluster of greenish-white flowers to cach stem. There are some varieties with very prettily varicgated leaves, and some with the leaves almost entirely white and having a purplish fringe along the outer edge. Being thick and fle hy, they present an apparance of was leaves. Any sandy soil will grow the Sodums wall, and they require no manure, liquid or otherwise. The S. Sieboldii will be the better for a seaton of rest for two or three months; and can lx propagated from cuttings of about two inches in length, after the manner of the Cactus; while the S. acre is gencrally hest propagated by divisions of the old plant. A later and more hardy varicty is the $S$. macrophyllum, or large-leaved, which in rapidly rising into favor. Being easy of cultivation, and gencrally of a variegated foliage, it commends itself as a special favorite for indoor or outdoor ornamentation.
and from seeds. For parlor culture it is best to secure good, healthy plants that are just about to start into leaf; as, if too far advanced in growth when removed, they are very liable to suffer from the change of situation unless in the hands of some one thoroughly skilled in their management. They are much helped by a daily syringing of the leaves, or, if inaccessible, the free use of a feather duster is a partial substitute. When raising the Smilax from the seed, the amateur must wait at least two years for his plant, though skilled cultivators have developed it in one year. The time for planting is in October, though greenhouse-men manage to keep two sets - one for summer and one for winter growth, planting a second time in midwinter. It does not require a very sunny place, and when at rest should have but little water until the vines begin to start. It needs frequent syringings to repel the red spider, its most formidable and destructive enemy.


## STEPHANOTIS.

ADAGASCAR is the native home of the Stephanotis floribunda, a lovely plant of the Milkweed family. It is called Stephanotis from two Grcek words denoting crown and ear, because of the resemblance in the shape of the anther, the crown of the stamen, to the human ear; and floribunda, from the wealth of its bloom. Most of the Milkweed family are not climbers, but the Stephanotis, the Hoya and some others, are exceptions. The flowers are from one to two inches long, with a waxen, pearly appearance, and grow in clusters around the stems of the axils, and being also very fragrant and of rather a handsome shape, they are of course much used for bouquets and floral decorations. The leaves are thick, fleshy and waxy, with a dark-green midrib, and are themselves a source of much beauty. The Stephanotis, though commonly ranked with hothouse plants, is easily cultivated in a parlor, and will flourish well throughout the winter if kcpt clean, supplied with liquid manure and tepid rainwater, and kept in an atmosphere not less than sixty-five degrees. About the beginning of summer it should be moved outdoors and placed, with or without its pot, in some partially-shaded bed or border, to enjoy a needed rest, and be moved back late in August or early in September to where it is designed to bloom. It can be propagated from leaves in the manner described under Hoyas, the stem end being inserted in sand to the depth of about half an inch. The plants of this genus are subject to scales and what are called cotton-bugs, which should be wiped off with a sponge in open placcs, and rubbed off with a half-worn tooth brush in the axils; but the regular syringing will ordinarily prevent their appearance. Although natives of a hot climate, they are liable to be scorched by intense heat through glass, and hence should be withdrawn from the glare of the sun. Perhaps, because being by nature clingers to something larger than themselves, a protecting shadow has become indispensable. The soil used is common peat earth, with a slight admixture of manure and sand to insure the necessary freedom from stagnant moisture.

## TRITOMA.

IRE-POKER plant is the familiar name of what is scientifically known as the Tritoma uvaria. Tritoma signifies thrice-cut, in the original Greek, and is supposed to represent the three sharp edges of the leaf, namely, the two margins and the keel; and uvaria, from the Latin, denotes the not very close resemblance of its raceme of flowers to a bunch of grapes. At a distance, the spike-like raceme looks more like a red-hot poker (whence its very expressive nickname), and, with its supporting stalk rises to a height of from two to four feet, nearly one-half being covered with the bloom. The flowers at their first appearance are a bright red, and change throngh all the shades of that color down to a light yellow, in which they continue the best part of the season. They are conspicuous at quite a distance, and never fail to attract attention by their peculiar manner of growth; near at hand they are no less striking by the offensiveness of their smell. The leaves, unlike those of most of the other Liliaceous plants, are narrow and grass-like, looking very much like a large tuft of dark-green pampas-grass; but they make up in numbers for what they lack in width. The Tritomas are often set out as ornamental plants in landscapes, lawns and gardens; but are scarcely ever introduced into the parlor or displayed in the window. This is another of those Cape of Good Hope bulbs that contribute so largely to the diversification of our Flora; and by its hardy habit is easily cared for even in our colder northern latitudes. Placed in a box, with a slight covering of earth to protect the roots, and an equally light covering of hay or straw for the head, it will survive any ordinary winter in a common cellar; and can be again planted early in spring as soon as all danger of the heavier frosts has disappeared. The Tritoma will flourish with the same soil and treatment as other Liliaceous plants; and may be propagated in the manner described under the head "Lily."


## $T R O P A O L U M$.

ASTURTIUM, from the Latin, meaning nose-twisted, is perhaps a more significant name for this genus of plants than the one, given it in science. It was probably intended to express by that word the pungent odor; while the scientific name Tropæolum, from the Greek tropaon, a trophy, seems to have no special application, unless it be because of the shield-like shape of the leaves; and perhaps an observable, though not very striking, resemblance between the flower and an inverted helmet. In ancient Greece, trophies raised on the field of battle were composed largely of captured shields and helmets. It is nicknamed Indian Cress on account of its sharp, pungent taste and its occasional use as a salad. The beauty of the flowers and leaves make it an excellent adornment for fences and rock work, while the fresh leaves may be used as a table vegetable, possessing marked anti-scorbutic properties. The T. Lobbianum, so called after Mr.

Lobb, a distinguished English collector, and the .T. peregrinum, named from its rambling propensities, are perhaps the choicest and most popular species for conservatory, parlor or window culture. In greenhouses they are grown abundantly, being trained along the rafters, where their brilliant blossoms illuminate the whole house, giving an abundant supply of floral gems for bouquets and decorative purposes. The Tom Thumb or dwarf bushy species are perhaps the best for hanging-baskets. The varieties in color are quite numerous, and the velvety texture of the flowers is charming, while the odor somewhat resembles the aromatic Cinnamon. When grown in quantities the seeds are gathered for pickles, and are used the same as capers. There are several very delicate tuherous varieties, differing in blossom from the ordinary kind, and only retaining their foliage a part of the year. They are adapted to pot culture, and bloom during April and May, afterward requiring plenty of sun or heat to ripen the roots; as the vines begin to die away, water should be gradually withheld. The pots should be turned on their sides, and kept dry until autumn, when they begin to start vines again. Among the choice species are the Tropæolum azureum, with an azure-colored flower; T. Jarrattii, yellow and scarlet, blooming abundantly; T. speciosum, scarlet; T. tricolorum, scarlet, yellow and black; and several others. All the Tropæolums, to grow well, must have plenty of moisture, a soil rather poor than otherwise, and frequent sprinklings to keep off the red spider.
 $T U B E R O S E$.

NDER this name is included a genus of herbaceous plants not at all allied to the Roses, as is often supposed merely because of the identity of the final syllable. The name really springs from the tuberous character of the roots; and the scientific name, Polianthus, is also rather confusing, as it lacks distinctive expression, meaning City-flower. It belongs to the Amaryllis family, and is chiefly cultivated for its fragrant flowers, which are of a pale sulphury-white color. The tubers of this odoriferous plant may be kept dormant for a long time in any dry, airy, cool place, but must be protected from frost. For early blooming they can be planted from January to March indoors; for later growth, at any time until June. Whenever the tubers show signs of growth, they should be planted at once in pot, box or bed where they are to bloom. Of course it will be necessary in winter to give them shelter in conservatory, greenhouse or elsewhere, with plenty of warmth and light. Neither as tuber or plant can they be touched by frost with impunity. In planting, as in all similar cases, the small tubers are best taken off and set in separate places. These will bloom in about two years if not neglected. A rich, loamy soil having been provided, a few pieces of broken crockery are placed over the hole of a six-inch pot, with the addition of a little moss if at hand, and the earth filled in to within about half an inch of the top, so as to cover the tuber about two thirds of its own length. When all danger of frost is over, they can be turned out of their pots into the border, or with them placed in the soil, to be brought into the house later if desired, when in bloom.

```
CULTIIATION AVD ANALFSIS OF PLANTS.
```

When the stalks begin to run up, stakes or rods should be driven into the ground near them, and the plants secured against the wind. In or out of doors they require an average heat of about sixty degrees, and should therefore be housed early enough not to be touched with frost. In their season of rest the temperature may be reduced to forty, but they are all the better for fifty degrees of heat and no stagnant moisture. Being evergreen in the native state, it is conjectured by some that the Tuberose eonld be sufficiently rested without allowing its leaves to die; and some florists have them in flower nearly all the year round.


## $T U L I P$.

REAT favorites in former times, when their cultivation fairly amounted to a mania, the Tulips have enjoyed the distinction of having immense sums freely spent in the endeavor to procure some new varicty. Those times, already far in the past, will return to them no more; yet they will never entirely lose their popularity, as their gorgeous blossoms brighten the earth simultaneously with the Hyacinth and Crocus, or about as soon as the grasses begin to elothe her in a mantle of green. Tulips are grown abroad much more than in this country, though they are as cany of culture here as there. There are special exhibitions of Tulips held in many eountries of Earope every year, which circumstance naturally gives a great impetus to their cultivation, and is itself a survival of the old mania. They construet canvas tents for their Tulip beds, which they hasten to throw up on the approach of every storm, and in many ways manifest a special concern about this favored plant. These show-flowers are known under the names of Bazatar, Flamed, Feathered and Self-colored Tulips. The latter are often watched for years, it well marked, to note their transformation into one of the other divisions. If the event transpires favorably, and a remarkably unique specimen is produced, it is seldom sold for less than one hundred dollars.

Tulips will grow in almost any soil unless there is too much moisture. The bulbs should be planted about six inehes apart and covered up to the depth of four inehes. The best season for planting is in October. As a protection against severe frost, a layer of leaves about six inches deep, with a foot of stable manure added, will be effective. This covering should of course be removed early in spring. In planting, the usual underlying handful of sand will be found, as a proteetion against rot, as serviceable to Tulip bulbs as to any others. After the flowers and leaves have died down, the hulbs should be taken up and stored away in some place not subject to damp. There are prineipally three species in cultivation, viz.: the Dutch, or Van Thol, the Oriental, and the Parrot. To secure a pleasing continuity of flowers, the readiest method is to set bulbs of each of these. The Van Thols bloom in March and April, the Parrots later, and the Orientals last, terminating with June. The Van Thols or Dwarf Tulips are usually planted for window or greenhouse eulture; the others are not so well adapted to sueh purposes.
$V E R B E N A$.


ERBENA is a flower to which we are perhaps more indebted for the gaiety of our gardens than to any other; and is a simple, procumbent plant from Buenos Ayres. For large beds nothing can equal it, as with judicious training a few plants can be made to cover considerable surface. The beds appear to the best advantage when cut directly in the lawn or grass, as the surrounding green heightens the effect of the brilliant colors by the strong contrast. Although the Verbena will grow in almost any soil, to thrive well it should have that most congenial to it, which is about two parts loam, the same quantity of leaf-mold or manure, and one part good sand. Having secured plants of such colors as will harmonize well, let there be made a cavity the size of the pot they are in, the ball be placed within it, and the soil pressed close around, the plants being arranged two feet apart each way. The branches are then to be laid entirely flat to the ground, and pinned down, so that they will root at the joints, for which purpose broomsplints doubled, forked sticks, or, what would be still better, the common wire hairpin, could be used, this treatment to be continued as long as the branches extend themselves. It would be an advantage to pinch off the early buds until the plants are well established, the future bloom being sufficient compensation. Watering freely at first, secures good leafage, which affords much protection in case of drouth. Seedlings, although they can be started in the open air with ease, give earlier bloom if sown in a box in the house or hotbed.

These plants are also most excellent for window boxes and verandas having a sunny exposure. In pot culture, for success, they must be kept in a growing state continually to insure health and thrift. Cuttings make better plants than the old ones, and should comprise about three joints of the young growth. They can be rooted in wet sand, and even in water; in either case they should be potted as soon as rooting is assured.


## VIOLET.

ARGELY used for bouquets and floral decorations, Violets, as distinguished from the favorite species called Pansy (already spoken of), are generally cultivated in four or five varieties, such as the Neapolitan or Italian, the English, the Russian, etc., and are highly valued by florists for winter decorations. For window culture they are best grown in a box, though with extra attention in the way of water and cleanliness they will grow well in pots. They all require a rich, sandy loam, and a shady situation. In moist climates they are much used in borders or for the edgings of walks. The flowers are small and simple, and not at all to be compared with the Pansy, though they have a very fine odor of their own, which makes them very acceptable in the absence of that transcendent favorite. In the early summer the plants, which grow in bunches, should be set out, about a foot

## CULTIVATION AND ANALYSIS OF PLANTS.

apart, in some quiet, sheltered place, the weeds and grass kept well subdued, and a liberal supply of water given when required. It will be of great advantage to mulch them with leaf-mold, sawdust or manure, according to circumstances, filling up the interstices between the plants, and completely covering the soil to the depth of two or three inches. As soon as frost makes its appearance, frames should be set over the beds and covered with glazed sashes, and in cold latitudes these frames should be banked with stable manure. In extremely cold weather the sashes will require to be covered with mats or shutters, which should be made close-fitting and weatherproof. Thus protected, they will bloom early in spring, otherwise the flowers will come later, or not at all. The extra labor and expense will be recompensed by the earlier flowering of these plants; and the frames, sashes, mats and shutters can be used for many other less hardy plants after having done service for the Violets. In warm climates these precautions are of course unnecessary, as there they will bloom all the year round if desired. Indoors, the flowers begin to appear in autumn, and continue to bloom through the winter and spring.

$W E I G E I A$.
ANDSOME, hardy and accommodating, the Weigela, so called in honor of the German botanist, Weigel, is a desirable shrub of the Bignonia family. The original species, introduced from China, was designated W. rosea, because of its rose-colored flowers. It is one of the prettiest of the shrubs that have, through the zeal of collectors within the last fifty years, heen made to enrich the Flora of Europe and America. The large, trumpet-shaped flowers, appearing generally in pairs at the axils on almost every stem, add much to the beauty of the plants, while the foliage admirably supports by its density and abundance the graceful effect. One new variety, called the W. variegata, will often have some leaves entirely white, others green, and still others mixed, all in the same plant. Another variety, the W. amabilis, will flower from May to October, surpassing the varicgata and rosea, whose blooming is confined to the earlier months, May and June; it also is superior to them in size of leaf. Small specimens of any of the Weigelas may be grown in the parlor, and being hardier than most house plants, are easily taken care of. They should have a season of rest, by withholding water, for one or two months in the early fall, to ripen their wood before being transferred to the house for winter blooming. The same course can be adopted to advantage with those which are to be left out all winter, for if watered freely to the close of the season, the frost would find many green shoots, through which it would seriously damage the whole plant. Being hearty feeders, they luxuriate in abundance of rich, liquid manure during the flowering season, in or out of doors; and the soil in which they grow can scarcely be made too rich. During hot, dry weather, they demand a free use of the watering pot. They can be best propagated by layering or side-shoots; by cuttings, also, if taken while the shoots are fresh and green, but these require to be carefully watered and protected from the winds.


## CHOICE NATIVE WILD FLOWERS.

Among the most widely-spread and attractive of native wild flowers are the following, selected from an almost innumerable multitude of like beauties.

Anemone nemorosa, or Wind-flower of the Woods, is a pretty, low-growing plant, adapted to any shady border or neglected corner in a garden, or where most other plants will refuse to grow. It is an early bloomer, shooting up its pinkish-white flower before the frost is fairly out of the ground. There are six species of the Anemone indigenous to the United States, and some imported ones are also cultirated. (See A. coronaria, p. IS.)

Uvularia, or Bellwort, is one of the prettient of the native Lilies, and blooms about as early as the Anemone. It comprises four well-known species, viz.: U. grandiflora, U. perfoliata, U. sessiliflora and U. flava, any of which is worthy of a place in the choicest indoor or outdoor collection.

Erythronium, or Dogtooth Violet - which, by the way, is not a Violet, but a Lily-is also a very pretty low-growing wild flower, which blooms about the same time as the foregoing; it has blotched' leaves, and its lily-like flowers gracefully droop and recurve their petals, as in the Fuchsia, but in open sunlight become wheel-shaped. There are four species of this plant which are indigenous in our American woods, all pretty, and destined to become general favorites for parlor or garden, as they already are in Europe.

Dodecatheon Meadia, or Shooting Star-sometimes called the American Cowslip, and not unfrequently in Fllinois the Prairie Pointer - is one of our neglected prairie-flowers worthy of a better fate. Flowering quite early, and needing but a damp place in any common soil in or out of doors, it fully equals the Cyclamen in the color, form and fragrance of its blossoms.

Tradescantia Virginica, or Spiderwort, is already described (p. 28i), to which may be added that it will flourish with little attention, in any soil, in or out of doors, requiring only plenty of sunlight and water.

Coreopsis, or Tickseed, already described (p. 94), is as easily grown as any of the foregoing wild flowers, but requires plenty of room to develop its best specimens.

Asclepias tuberosa, or Butterfly Weed - sometimes called Pleurisy Root-is a very fine ornamental plant that grows wild on most sandy or gravely soils throughout the country, awaiting the notice of floriculturists. In a few instances it has been transferred to gardens with good effect, and will no doubt one day be extensively cultivated in and out of doors, as its perennial roots, besides its native attractiveness, will specially recommend it.

Cassia Chamæcrista, literally signifying Dwarf-crested Cassia, is familiarly called Partridge Pea, because of an alleged partiality of the partridge for its seed. When not in flower it so closely resembles the Mimosa, or Sensitive Plant, as to be sometimes mistaken for it; and as it evinces a degree of sensitiveness, by closing on the approach of rain or night, this mistake is not inexcusable. But they are essentially different, as the Cassia has a very bright, showy, large, yellow flower, while the flower of the Mimosa is very insignificant. The Cassia has already been introduced into the seedsmen's catalogues, and is of course forevermore rescued from oblivion. It is adapted to indoor or outdoor purposes, and those who have experimented with it prefer to raise the seedlings under glass.

Liatris, or Blazing Star of our western prairies, is a very fine, showy plant for outdoor cultivation. There are at least ten species indigenous to the United States, all of them pretty, desirable, and easily cultivated. Their bright, purple-red flower-spikes constitute their chief attraction.

Gentiana crinita, or Fringed Gentian, so graphically described by our great American poet, William Cullen Bryant, is deserving of all the effort and expense that may be necessary to introduce it into cultivation. It now grows naturally in moist, sandy places, and those who seek to cultivate it should endeavor to prepare similar surroundings. There is quite a number of other species of the Gentian, all of them hardy, interesting and worthy of attention. Many of these will undoubtedly prove to be very acceptable house plants, as well as garden ornaments, at no rery distant day.

Asters, or Starworts, are a numerous family of extremely pretty plants, there being no less than sixty native American species, all of which are very admirable for the abundance and beauty of their flowers.


#### Abstract

Sometimes a single plant will attract great attention on account of the dense masses of flowers with which it is covered. The most common and perhaps the most desirable species are the A. multiflorus, just alluded to, generally abounding in white flowers; the $\Lambda$. grandiflorus, where the flowers are somewhat larger and usually purple, with a yellow eve; and the A. cyaneus, with lanceolate leaves and large blue flowers; this last is perhaps the handsomest of all the Asters. It is clear that these plants may be easily cultivated here in their native habitat, when so many have been cultivated in Europe as exotics. They will grow in any soil, providing it is artificially or naturally kept moist. Some species grow too large for indoor culture, but the smallest plants of the A. multiflora would certainly prove very delightful house plants, as their mild fragrance, abundant bloom and comparative indifference to attention could not fail to give satisfaction.


The wild plants here selected will constitute a nice collection in themselves, and have been chosen because of their general excellence, and also because they will supply a continuous bloom, in about the order in which they have been named, from early spring until early frost. But time and space would fail us to emumerate half the heautiful wild plants that adorn our woods, prairies, mountain slopes and shaded valleys, and the little that has been said is rather by way of suggestion than elaborate treatment.


## $C L I M B I N G \mathscr{P} L A N T S$.

OR house decoration nothing is finer than a good climber, and the number of varieties that can be grown around a window frame or doorway, over a mantelpiece, or to entwine a picture, is so great that it is difficult to make a choice. And even in our northern latitudes anybody who is rich enough to afford a fire during the night may indulge in a choice climbing plant. The investment of a few cents in such seeds will furnish, with little care, a beautiful framework of foliage and flowers for a whole winter. The wealthy may indulge in an endless variety of pretty climbers, native and exotic, but every one may have one or more of the native kinds, which scarcely fall behind the more expensive imported beauties. Some are cultivated for the richness and abundance of their foliage, which is, moreover, in a few varieties, remarkably variegated; others for their curiously-shaped flowers *like a bell, finger, or trumpet - which are also often strikingly marked in various colors.

There is a pleasure in daily watching a plant climb, creep, or twine itself around the things near it. The rapid growth of many of them is truly wonderful, some making no less than six inches in a single day. The seeming intelligence with which they appear to feel and reach out for supports is one of the most striking phenomena of plant life. The adjusted proportion with which they push out a flower here and a bunch of leaves there, is truly artistic, being carried on under the guidance of that greatest of all artists, Mother Nature.

The whole collection here loosely designated Climbing Plants, may more properly be divided into Climbing, Twining, Creeping and Trailing Plants, from each of which classes a few choice examples are subjoined.

## CLIMBERS.

Climbers proper are such as send out coiled tendrils, an inch or more in length, by which they lay hold of either projection or crevice, to sustain themselves as they climb. They, however, sometimes dispense with these tendrils when a natural support for the main stems has been already attained; as, for instance, when a long shoot has reached the summit of a house, tree, or other horizontal or nearly horizontal surface. Among them the most deservedly popular are perhaps the following:

Passiflora Fordii.-Ford's Passion-flower, so called in honor of a celebrated English florist of that name, is one of the prettiest and every way most desirable of the true climbers, being larger than the older type, P. cœrulea (p. 233), and more easily cultivated. It is preëminently a parlor plant, surpassing anything of the kind that has been introduced for years; it will, however, like most climbers, do well outdoors from early summer until frost. The very remarkable shape and appearance of the blossom, from which the generic name Passion-flower is derived, is still more conspicuously beautiful and wellmarked in this variety, which has most probably been hybridized from the old P. corulea and the later P. trifasciata.

Clematis virginiana. The common Wild Virgin's Bower is known scientifically by this name, and it is among the finest of outdoor climbers, being well adapted to conceal unsightly objects in a lawn, yard or garden. (See "Deformities Concealed," page 333.) It is covered with large clusters of white flowers in July and August, which are followed by a crop of the large, plumose, grayish tufts that envelop the seeds, making the plant appear as if short wool-clippings had been spread all over it, thus constituting a very singular object in a collection.

Clematis Sieboldii, originating in Japan and introduced thence by the well-known traveler whose name it bears, has very large blossoms of an azure-blue color, not unlike those of the Passion-flower. It is a rapid grower, and flowers constantly indoors, and, in tropical climates, out of doors.

Clematis Jackmanni, so called from a florist of that name, is a hybrid from the C. Sieboldii and some other spécies of Clematis. It has a very large flower of a purplish-blue color, often five or six inches in width. The flowers have unusually long footstalks; hence they stand away from the stems and leaves, giving the plant quite a graceful and unique appearance.

Clematis John Gould Veiteh, or "Double Blue Clematis," is perhaps the climax of beatty and grace in the Clematis tribe. The flowers are not only double and of a fine azure-blue, but they last longer than the others, often remaining for several weeks; and a well-grown plant sometimes gives the appearance of a string of blue balls, reaching from the base to the summit.

There are perhaps not less than forty other species or varieties of the beautiful Clematises, all in cultivation, which may be procured from any first-class florist.

Cobæa scandens, or Climbing Cobæa, is an extremely handsome climbing plant, with large, pinnate leaves, producing a dark-purple flower not unlike that of the Foxglove in shape, and blooms all summer . out of doors. Indoors it will bloom throughout the winter. There is a variegated sort which has the added attraction of varying colors in the leafage, sometimes the leaflets on one leafstalk being entirely white, while those on the next will be the usual green.

Eccremocarpus scaber, literally Rough Hanging-fruit, is a very beautiful climber; its leaves resemble some of the Ferns or the Meadow Rue, and it has a flower which is a dull red on the top, and a light yellow at the bottom. The plant grows rapidly in a warm atmosphere, in or our of doors.

Cncurbitacex, or Gourd Family, comprise many beautiful climbers (see Lagenaria vulgaris, p. I47; Echinocystis lobata, p. 333). They are highly ornamental both in fruit and foliage, and admirably adapted to hiding unsightly places.

## TWINERS.

Under this term are included such plants as do not shoot out tendrils like the climbers' proper, but wind or twine their stems or leaves around supports as they monnt upward.

Ipomea, or Morning Glory, is perhaps the best known of twining plants, and is entirely worthy of its great popularity. Its habit of growth is very peculiar: At first it sends forth two curiously-shaped seed-leaves, quite different from the aftergrowth. Between these two leaves springs a shoot with a small, heart-shaped leaf, which grows to a relatively large size; for when first noticed it is like a pin's head, and in a few days it reaches a diameter of three or four inches. The shoot mounts higher, throwing these broad leaves to either side, and twines around any projection that offers, as if gifted with intelligence. In time a trumpet-shaped flower appears at the axil, opening most generally in early morning, whence its common name; and, perishing before night, is not infrequently replaced by other flowers, sometimes to the number of eight or ten, continuously, on the same axil.

Quannoclit vulgaris, or Cypress Vine, is already described, page 171.
Calystegia sepium, or Bracted Bindweed of the Hedges, is a twining plant often found by the roadsides of our country, east and south of the Mississippi, and is a very fine plant, well adapted to house culture. A double variety of it is much used by the florists for hanging-baskets and for training into window-frames in or out of doors. The roots being perennial, it can be kept from year to year undisturbed in the same place, to yield its annual wealth of leaves and flowers as a cheap embellishment to our homes. The ease with which it may be secured, as well as cultivated, should not be allowed to depreciate its value in the estimation of lovers of flowers. Should the vine at any time become unsightly, the whole may be pruned down to the ground, when it will make a new, healthy start, if in a warm atmosphere and duly refreshed alternately with liquid manure and water.

Boussingaultia baselloides, or Madeira Vine. This is another cheap and easily procurable twiner, requiring but little care in the development of its beauties. It will grow thirty feet long, and spread laterally as much more, in one season, under favorable circumstances. As the plants grow larger they need more root-room, and therefore require not infrequently to be transferred to larger pots several times in a season. It will do no harm to begin with a larger pot than they need, provided that the soil is not too much watered.

Mikania scandens, or Parlor Ivy (perhaps more familiarly known as German Ivy), is a rapid-growing substitute for the slower and more valuable English Ivy, this rapidity of leafing constituting its principal recommendation.

Lonicera, or Honeysuckle, of which there are several highly-prized species in cultivation, is a well and favorably known genus of twining plants. The most popular species is perhaps the L. sempervirens or Trumpet Honeysuckle. It flowers all the season out of doors, and makes a good parlor plant when rightly cared for, blooming all the year round in skillful hands, whence it is called sempervirens, always green or flourishing. It is unnecessary to describe or even to name the different species or varieties of the Honeysuckle; they are all pretty and desirable twiners, easily procured and as easily cultivated, and most of them are very hardy.

Celastrns scandens, or Climbing Bittersweet, is a native twiner with beautiful, glossy leaves, and waxy, red berries which hang on the plant until late in the fall, and often through the winter.

Aristolochia sipho, or Dutchman's Pipe, is already described on page 35 .
Lathyrus odoratus, or Sweet Pea, is another old favorite because of its abundant butterfly-shaped flowers, and the sweet fragrance (whence its specific name), which may be replaced but not surpassed by new claimants for popular esteem. The different varieties have differently-colored flowers, and from a single seed-packet one may sometimes have half a dozen variations in color.

Maurandia, in three choice varieties, mostly with a pale-purple or bluish flower, is an acceptable, low-growing twiner, adapted to hanging-baskets and window-screens.

Thunbergia, also in three varieties, somewhat resembles the Morning Glory, but the tube of the corolla is closer, and the flower is more flattened on the top, resembling a miniature table. The color is orange, yellow or white, with a black eye in the center of each flower. They are very subject to Red Spider, and therefore not desirable for house plants.

Menispermum Canadense, or Canadian Moonseed, is among the favorite twiners, but is not so generally known among amateur culturists as it deserves to be. The small, yellow flowers grow in drupes in the axils, and the fruit, which is a small, dark berry, grows in a thyrsus, resembling a bunch of grapes. Another species, the M. palmatum, is much grown in Mozambique and other parts of the east for its
commercial value, yielding the well-known tonic and antiseptic drug, calumba. The M. Canadense possesses the same properties, but in an inferior degree. It is, however, grown in this country mainly for its ornamental flowers, fruit and leaf.

Wistaria Sinensis, or Chinese Wistaria, is a rapid-growing twiner of superb appearance in leaf and flower. The flowers come in long racemes like the Lupine inverted, but larger and more waxy in texture, while in color they resemble the Lilac, which, however, they surpass in the delicate tintings, often progressing through the various shades from a deep blue to a pearly white. There are many varieties of the Wistaria, but none superior to the W. Sinensis. Their size forbids their adoption as indoor plants unless in large conservatories.

Phaseolus multiflorus, or Scarlet Runner-sometimes called Spanish Bean - though most frequently cultivated as a vegetable, for the pod and the inclosed bean, is not to be despised as an ornamental indoor or outdoor twiner. It sends out long racemes of bright scarlet, butterfly-shaped flowers, which, contrasting with the green foliage around, produces a very pleasing effect. Many people grow it because of its artistic beauties, elevating it from the kitchen garden to the parlor window.

Adlumia cirrhosa, or Fringed Adluniia, is one of the most beautiful and hardy of twining plants. It climbs by its leafstalks, which serve the purpose of tendrils, and grows to a height of ten or twelve feet in a season. The flowers come in delicate flesh-colored panicles, and succeed each other all summer.

Jasminum officinale, or White Jasmine, is already described, page 175 .
Humulus lupulus, or common Hop, page 162.
Periploca Graca, (literally Greek twiner), or Silk Vine, is a hardy, ornamental twiner, common throughout our northern States and worthy of attention.

## CREEPERS.

This class of plants is distinguished by the property of clinging by the rootlet-like shoots, or sucker-like attachments, which it sends out at convenient distances, for catching hold of the wall or other surface or support along which it creeps.

Hedera Helix, or English Ivy, is perhaps the choicest of all creeping plants, and has been immortalized in prose and verse, Charles Dickens's almost unique contribution to poetic literature, "The Ivy Green," being forevermore associated with its beauties. The permanency as well as the deep, glossy, green color of the leaves makes it a universal favorite. Its hardy qualities render it fit for cultivation almost everywhere; and it needs more protection from heat than it does from cold. It thrives best in the United States when planted to the north of a house, fence, or other shade. A good way to save outdoor Ivies in winter is to lay them down carefully along the ground, and cover with sods in their natural position, grass upward. Indoors, the English Ivy should be kept clean and shielded from an excessively dry heat. In ordinary living rooms, a daily damping of the leaves will prove sufficient. (See p. 174.)

Ampelopsis Veitchii, or Veitch's Creeper, a distinct species introduced from Japan by the florist Veitch of London, is of the same genus with the A. quinquefolia, the common American or Virginia Creeper, but differs much in the manner of growth, the structure of the leaves, and other peculiarities. Its young shoots are of a rich, brown purple, and its leaves are rounded and simple, while the flower is inconspicuous. A peculiarity of the Veitch's Creeper that should strongly recommend it to a more general acceptance, is its habit of attaching itself, without aid from its owner or mechanical contrivance of any kind, to whatever object is near; the young stems send out sucker-like attachments by which they cling to wood, stone, or indeed to any substance, however smooth. Another attractive feature of this Creeper is the crimson-purple coloring of its rather persistent foliage, which clings to the branches often until midwinter in sheltered places, presenting an appearance almost as bright and beautiful as if the leaves were so many flowers.

Ampelopsis quinquefolia, already alluded to, has five leaflets with serrate edges on a common stalk, curling gracefully downward, and is so familiar, under the name of Virginia Creeper, as to need no further explanation.

Tecoma radicans, or Trumpet-flower, has been described, page 304 .

Ficus repens, or Creeping Fig, originally introduced from China, is now a very popular delicate creeper, which holds itself firmly by its rootlets to any uneven surface, and is much used in conservatories, but not out of doors. In parlors it should be planted among other plants, as it requires shade and moisture. The leaves are small and firm, resembling green parchment, and will endure much neglect without being destroyed.

## TRMILERS.

The epithet "trailing" is sufficiently indicative of the habit of these plants, whieh might be said to hug the ground, so low is their growth.

Epigra Repens, or Trailing Arbutus - sometimes called Mayflower - has been put forward in some quarters as suitable to be adopted as the national flower of the United States, and is described on page 23.

Tradescantia zebrina, or Wandering Jew, is a low-spreading, trailing plant, differing from the more erect Tradescantias in that respect, and striped in brown and green, zebra-like, whence its specific name. There is another species - the T. alba, or white-flowered. Both are much used for hanging-baskets and for rock work, or to cover old stumps or other deformities. They demand copious moisture, but are almost indifferent to soil conditions. They are of the same genus as the T. Virginica, page 281.

Several Trailing Plants have been described elsewhere, as follows: Mentzelia Lindleyi, or Golden Bartonia, p. 42. Stellaria media, or Chickweed, p. 8i. Mesembryanthemum crystallinum, or Ice-plant, p. 169. Portulaca grandiflora, or Great-flowered Portulaca, p. 249. Potentilla formosa, or Handsome Fivefinger, p. 250. Trifolium repens, or Shamrock, p. 27+. Fragaria venci, or Wood Strawberry, p. 287. Verbena Aubletia, p. 3ir. Nepeta Glechoma, or Ground Iyy, p. 148. Vinca, or Periwinkle, p. 237.

These are but a few of the many plants of the four classes-Climbers, Twiners, Creepers, Trailers - that might be mentioned, and are chosen because they are all easily cultivated, needing but little care when once established, and because they are, in foliage, flower and fruit, the most beautiful of their respective kinds. Moreover, they all may be easily propagated from cuttings or slips, by layering, and from divisions of the roots, ats well as from sced.

The best gencral rule for cuttings would be perhaps to make them in the early spring before the plants begin to sprout, burying them about two inches, or a third of their length, in the ground. In the hands of a skilled workman these cuttings can also be taken in the fall, the same method being followed. Green shoots two or three inches long, severed from the parent stem, with a little of the old bark attached, will generally make good plants if placed to strike root in a box of moist sand, and protected from drying winds as well as excessive heat.

A light, rich soil is congenial to most if not all the climbing plants of the foregoing classes; and a good artificial soil will comprise two parts leaf-mold, one cow-manure, one loam and one sand. They are, however, not especially dependent on soil conditions, but require, as essentials to a thrifty growth, abundance of water for leaf and root; and an oceasional application of liquid manure, if one wishes to take the trouble, will insure a more vigorous growth and an increased lovcliness of foliage. Their chief enemies are the red spider, scales and caterpillars, which can casily be kept down by daily syringing and other careful attentions.

If it be desired to test the full capacity of the common climbing plants, the soil should he dug to the depth of about a foot, and on each available side to a distance of three feet, when the earth thus disturbed should he freety mixed with manure and leaf-mold in about equal parts, and plenty of root-room allowed to each plant, especially for the first season.


## $F E R N S$.

NOWN to science as Filices, from the Latin, these flowerless plants possess a characteristic charm in their peculiar leafage or fronds. The many pretty forms of these leaves, and the various shades and tints of color, from a pure bright green to a golden yellow, are among nature's loveliest products. They constitute a remarkable family of the class designated Acrogenous, from two Greek words that signify increasing in growth from the extremity, which is one of the most conspicuous classes of the Cryptogamous or Flowerless series. The whole Fern family, or Order of Filices, is divided into eight suborders, six of which are represented in the United States. It is only within a comparatively recent period that these lovely members of the vegetable kingdom have been thought worthy of a place in collections of plants. Lacking the common element of conspicuous flowers, with their accompanying attractions of brilliant coloring and fascinating fragrance, the Ferns had long failed to elicit the admiration they deserve. But a more refined taste has learned to fully appreciate their merits, and specimens are now brought together from nearly every quarter of the world to adorn gardens, conservatories and parlors. In fact many wealthy admirers build greenhouses for their exclusive cultivation. Some Ferns from tropical and subtropical climes often have a tree-like appearance, while others from colder regions are so dwarfish that they have frequently been mistaken for mosses by those not possèssed of a thorough and discriminating botanical knowledge. Mar1y of them succeed well as common house-plants when kept out of drying winds or currents of cold air, care being taken to dampen their fronds daily. Some are hardy enough to endure excessive heat as well as ordinary winds, with the simple provision of supplying enough of moisture at the roots. The Lomeria Gibbii will even grow best in a strong sunshine; also the Scolopendrium vulgare, the Polypodium vulgare, and the Adiantum capillis-veneris will grow well in an exposed situation. Some Ferns, as the Adiantum cuneatum, A. trapeziforme, A. Farleyense, Lygodium palmatum, and many others, will only grow well in moist, still situations, as in a Wardian case or in a quiet nook sheltered by other plants.

As a generally good, manufactured soil for most Ferns, chopped sphagnum, or gray hog-moss, common loam, broken charcoal or potsherds, and sharp, silver sand, all well mixed in about equal parts, cannot be surpassed.

Ferns are often found growing on inaccessible rocks near mountain streams, or in the valleys, in the woods or on the prairies, varying in size and form. One that most delights in rocky places, is a curiosity of its kind, and is familiarly known as the Traveling Fern. Its leaves bend over until the tips touch the earth, where they readily strike root and form new plants. These doing likewise, the whole constitute a network of Ferns often covering several square yards. All the foregoing species of Ferns are evergreens, and every house or yard may be beautifully decorated at little or no expense by a collection of native Ferns, the many and various members of which may be picked up in country rambles. A good guide to their successful cultivation would be to note the soil and location where they naturally flourish best, and endeavor to reproduce in their new home the
same conditions and surroundings, as nearly as circumstances will permit. When Ferns, or indeed any plants, are collected at a distance, they should be wrapped in a closely-woven wet cloth, both roots and fronds, and the bundle wrapped in another but dryer cloth, for transportation. Two common handkerchiefs, one wet and the other dry, will serve the purpose very well. In this way they can be safely carried long journeys, while for shorter distances, paper wrappings will suffice.


## $G R A S S E S$.

HISorder of plants, scientifically designated, from the Latin, Gramineæ, is one of the most useful of nature's products for the support of animal life, and is coëxtensive with the animal kingdom, being found almost everywhere. In tropical and subtropical climates, some of the grasses assume a tree-like appearance, as the Bamboo, Sugar Cane, and Indian Corn. Wheat, Oat, Barley, Rye, Rice and some others furnish the staple food for the great majority of mankind; and most domestic as well as many wild animals derive their sustenance from these and other members of the Grass family. And as the human family depends largely upon these animals for food and clothing, it is not easy to conceive, much less to estimate how much the world owes to the two hundred and ninety-one genera and three thousand eight hundred species of the grass family. In this large array there is but one species that is not nutritious; this is known as Lolium temulentum, or poisonous Darnel Grass, which fortunately is not very plentiful. Where found, its rough exterior and bitter taste are repulsive to animals, and therefore its destructive powers are but little felt. Our home surroundings are often beautified by the shortcropped lawn Grasses, making a delightful natural carpet for children's play, as well as a pleasing object for the eye to rest upon. Though far removed from the gaudy and brilliant colorings of the Tulip, and for the most part but simple, unpretending plants, the Grasses possess a modest beauty all their own, or shared only with the Ferns. The florists and collectors have been busy for some time in bringing together the Grasses from distant parts of the world, and an admirer might now collect in his yard or window enough of specimen Grasses to effectively aid his children in their geography lessons, on the well-known principle of association of ideas. For instance, he might say this Grass in our southwest corner is from New Zealand; that in the southeast is from Australia; that other in the extreme east is from Japan; the next to the west is from China. And thus he inight form the circuit of the whole world, pointing consecutively to the Grasses of India, Persia, Turkey, Greece, Italy, Spain, Portugal, Azores, West Indies and America. Many of the Grasses are well adapted for indoor culture, and all for outdoor, in their proper climatic surroundings. Among the very choicest of the former are Panicum variegatum, which presents transformations of color equally singular and beantiful; the Isolepsis gracilis, with its bright-green, wiry leaves, adapted to borders in

## CULTIVATION AND IVALTSIS OF PLANTS.

shaded nooks; Festuea ceca, which is a fine ornamental grass for pots or vases, and contrass well with the Holcus lanatus, or Velvet-Grass, which is of a silvery appearance and not unlike the common ribbon-grass of our gardens, but of finer texture. These four Grasses which we have singled out form a neat little collection for indoor culture when grown together, even without any admixture with other plants. A generally acceptable soil for the growth of nearly all Grasses, is made up of equal parts of cow-manure, leafmold, loam and sand well mixed; and all Grasses like water, but not stagnant moisture.

## HEATHS.



ELL known to our Anglo-Saxon literature, because indigenous and widely spread in the countries where that literature had its rise, the Heaths have been but little cultivated in the United States, although it is now recognized that twenty-six of the genera are natives of this country. The order is scientifically called Erieaceæ, from Erica, the Heath proper, the accepted type of the family. There are five or more suborders, perhaps seventy genera, and about eleven hundred species, besides uncounted varieties. Erica carnea, fleshy Heath, so called on account of its flesh-colored bloom, and Erica Mediterranta, or Heath of the Mediterranean, whose bloom is of a somewhat darker flesh-color, are cultivated by our florists and others, and are much valued as exotics. They make desirable window plants if plentifully supplied with moisture and protected from excessive heat, whether artificial or natural. The more common indigenous sorts are the Kalmia, or Sheep Laurel; the Azalea arborescens (Tree-like Azalea), or False Honeysuckle; the Rhododendron, or Rosebay; the Rhodora Canadensis, or Canadian Rhodora; the Ledum latifolium, or Broad-leaved Labrador Tea; the Andromeda in several species; the Vaccinium in a large number of species, known in the vernacular as Blueberry, Cranberry, etc.; Gaylussacia, or Huckleberry; and the Pyrola, or False Wintergreen.

All these members of the Ericaceæ family are of easy culture, but, being originally natives of bogs, downs and sheltered mountain dells, they grow best on northern slopes, behind fences or evergreens, or otherwise protected from the noonday sun as well as from drying winds. Like the Begonias, they delight in a steady supply of uniform moisture. The fibrous rootlets are very fine, and extremely sensitive to deleterious substances, such as clods of half-rotted manure, lumps of clayey, uncongenial soils, and the like.

The best compost for their growth is three parts leaf-mold, one of sharp sand, one of common earth, and one of well-rotted manure. Commonly growing upon a substratum of freestone, a limestone or other calcareous subsoil is hurtful, and the application of lime-water is accordingly found to be pernicious; hence rainwater should alone be used. An occasional dose of liquid manure will prove acceptable to these plants when in flower or when making a new growth. The Ledums, Kalmias, the small plants of the best varieties of the Rhododendron, the Azalea nudiflora, and other dwarf members of the family, besides the two imported species already mentioned, make pretty house plants.

In a south－looking window the young leaves require careful protection from the sun＇s rays， as they may easily be scorched beyond recovery．

Though exposed to the open air，and at a rather low temperature，in their native homes，these plants are less hardy than would be supposed，and therefore should be carefully shielded from strong，drying winds，whether hot or cold．

The most common plant of the whole order is the Calluna vulgaris，which covers extensive tracts of waste moors throughout Great Britain and Ireland，and which is also found sparsely in Canada and our New England States．This is more hardy than any of the other species，and will flourish in almost any soil with a temperature under fifty； but in more southern latitudes it requires to be shaded in hot weather．


MOSSES．
USCI，or Mosses，which comprise three orders and thirty－six genera of cryptogamous plants，are among the lower forms of vegetable life．In the economy of nature they come next to the Lichens，or Lichens，serving by their decay to form a suitable soil for the more beautiful and more useful plants．They grow in such dense，compact masses－often a hundred to a square inch－ that their remains constitute a bed in which plants of a higher order may strike root．They are to be found in all climates and on all soils，requiring as absolutely essential only a constant，gentle moisture．The Mosses cover with a coat of emerald green the trunks of trees，the sides and summits of barren rocks，the moldering walls of old ruins，the margins of running brooks，the crevices of damp，subterranean caves and the like．The Sphagnum palustre，or Gray Bog－moss，is much used in Lapland and other countries of North Europe，for bed－ ding and coverlets．When flattened out by use，they can be renovated so as to assume their original elasticity by being soaked in water and again dried．The tenacity of life in the Mosses is truly wonderful；they have been known to have rooted and grown afresh after having lain pressed in a herbarium for thirty years．

In collections of plants，it is found worth while to cultivate them as toppings for the stands，pots or boxes in which ornamental plants are grown．They prevent a too rapid evaporation of the moisture，where it is desirable to retain it，besides adding a neatness which the uncovered soil does not present．Some amateurs make a specialty of growing a patch of Mosses for the yard or house，because of their intrinsic beauty，and the refresh－ ing greenness of the dense，compact mass in which they grow．They can be studied to advantage only with the aid of a microscope，and are by that means found to present the appearance of miniature trees and various other curious forms．The Tortulas resemble small，fine screws，whence their name．The Hypnums，or Feather Mosses，are probably the most numerous，and are often exceedingly pretty，resembling miniature ferns，feathers， or trees．

hand, and those of the useful plants on the other, man is enabled to select the materials proper to be used in accordance with his varying needs. It is easy to eat too much of plants that contain sulphur, lime, phosphorous, fatty, carbonaceous matter, or any other of the chemical ingredients of plants, when the system may really demand the use of those endowed with quite different properties; hence the value of this knowledge.

It is truly wonderful that an order of plants, containing perhaps several hundred genera and many thousand species, will maintain, throughout all their variety of form and color, a predominance of one or more chemical elements. For instance, the Cruciferæ, or Mustard family, one of great utility to man, every member of which affords nutritious and medicinal benefits, principally anti-scorbutic, or scurvy-destroying, in character. They all contain nitrogen and sulphur more largely than other plants, which accounts for their yielding ammonia when undergoing decay, as well as for their blood-purifying properties. Many of our familiar table condiments, as mustard, horseradish, cress, etc., belong to this order. The Cruciferæ are natives of the temperate zone, and are a natural antidote for the excessive use of fat-producing matters, so common in those regions.

The order Leguminosæ is perhaps the largest of all, and is remarkable for containing lime, albumen and starch. Its value in the animal economy is great, as.it furnishes the bone and sinew, which constitute the essential framework of the animal structure. Like the other useful plants, they are found everywhere, to meet the necessities of universal animal life, while the poisonous or dangerous plants are confined to a very limited range. The Leguminosæ are also possessed of many well-known medicinal properties, whose value can scarcely be overestimated. Plants yield about thirty-four different products, such as resin, oil, wax, gluten, starch, sugar, etc.; and at least eight well-known acids, viz.: oxalic in rhubarb, tartaric in grapes, citric in lemons, malic in apples, gallic in oak, benzoic in balsam, prussic or hydrocyanic in almonds, and phosphoric in oats.

Vegetable chemistry, as may be conjectured from the remarks already made, is much too extensive a subject to receive proper attention in a subsidiary paragraph of a popular work devoted mainly to the poetry and cultivation of flowers; but this much it has been thought desirable to insert as a slight hint on an important subject, and a stimulus to further investigation.

For the more easy comprehension of the general principles of botany by the unscientific lover of flowers, it is now proposed to consider the individual plant under the various relations of its internal structure, and its component parts viewed externally, together with the more important subdivisions of these, in a natural sequence, and in as few words as possible. What plants are composed of becomes then the next subject for consideration.

## TISSUES.

Plants are made up of innumerable minute sacs, called cells, and. generally of a lot of tubes or vessels, which were also originally rows of these cells, the whole constituting the material substance of plants, or what is technically known as tissue. The nourishment of plants passes from cell to cell through the thin membranes that constitute the cell walls. These cells are of a definite structure, as found by microscopic observation, and the tissues are of different kinds according to the structure and arrangement of the cells and tubes.

```
CULTIVATION AND ANALYSIS OF PLANTS.
```

Cellular tissue, which composes the whole structure of some of the lower orders, as mosses, seaweeds and the like, is where the whole mass is made up of these minute oval sacs crowded close together. Peculiarly flattened, they compose the outer layer known as the skin or epidermis.

Wood tissue consists of long tubes, tapering and closed at the ends, placed side by side, which form in woodly plants what is known as wood proper.

Bast tissue consists of long, flexible tubes, closed at both ends, and is mostly found in the liber or inner bark, constituting in hemp and flax the portion of those plants used in the manufacture of linen, ropes, etc.

Vascular tissue consists of long tubes or vessels, formed of superposed cells the partitions between which have been absorbed, and comprises what are variously called dotted ducts, spiral vessels, annular bands, etc.

The chief organs of plants are four, viz.: 1, Root; 2, stem; 3, Leaf; 4, Flower. Each of these is subdivided under different aspects and relations.


## $\mathscr{R O O T S}$.

OOTS are the parts hy which the plant draws nourishment from the soil, and are sometimes supplied with rootlets, holding about the same relation to them that they do to the plant. Roots are of six kinds: Fibrous, when composed of tufts of fibers with pores at their points, as in common grasses ( $1^{*}$ ); repent or creeping, as in the Couch-grass (2); fusiform, or spindle-shaped, as in the Carrot (3); premorse (as if bitten off) when the spindle-shape ends quite abruptly, as in the Plantain (4); tuberous, as in the Potato, where the root comprises one or more roundish, solid masses, fed by rootlets from the soil (5); bulbous, where the root is one round, solid mass, producing buds from the upper surface and rootlets from the lower, as in the Narcissus (6); the bulhous is, however, sometimes a mass of overlapping, fleshy scales, as in the Lily (7), or of concentric coats, as in the Onion.

Collar. - The collar is that portion of the plant where the root merges into the stem, or where they both unite (8).

In respect of duration, roots as well as plants are designated and defined as follows:
Annuals are such as in one season grow from the seeds, blossom, and ripen their seeds for the following year, and then perish. Among the annuals are to be found many of the most charming of the summer flowers, some blooming for short periods of a week or two, and others during the whole season.

Biennials are such as start from the seed one summer, and spend all their strength in establishing their roots and laying up nutriment for the flowerstalks of the following year, when they blossom, ripen seed, and perish, having fulfilled their mission. Some very pleasing flowers are found among this class. In order to have flowers of any of the biennials every year, seeds must be sown each year, thus calculating a year in advance.

* The flgures inclosed in purentheses, tor. q04 to 4 ro, refer to the illustrations on page 328.

Perennials are those that live and bloom year after year, except under extraordinary vicissitudes, many of them blooming the first summer if sown early in the spring. Such plants can be propagated by a division of the roots and cuttings as well as by seeds. Some of these cannot be surpassed for utility and beauty, and are best for permanent beds where circumstances will not permit the steady attention demanded by other classes of flowers.


## $S T E M S$.

EXT to the root is the stem, or that part of the plant which springs from the root, and serves to support the leaves, buds and flowers. It usually seeks the light, appearing above the ground, and is subdivided as follows: Simple, when found without branches (8), as in the Parnassia; compound, when branched, as in the Chickweed (9); forked, when parted into two equal or nearly equal branches, as in the Bouvardia (10); erect, when growing upright, ascending, when rising obliquely upward - when several stems grow from the same root, the central one is often erect and the others ascending, as in the Violet (11); prostrate, or procumbent, when it lies flat along the ground, as in the Petunia; creeping, or repent, when it runs along the ground and sends ont roots from its jointssometimes a plant has an upright stem, and sends out creeping shoots from its base, as in the Strawberry (12); twining, or voluble, as in the Hop, when they rise by spirally coiling themselves around supports; climbing, or scandent, when they rise by clinging step by step to other objects, as in the Ivy.

Stems are classified according to certain peculiarities of size and duration, as follows:
Herbaceous, when they die down to the ground every year, as in Mint or other herbs, whence the epithet; fruticose, when living from year to year, and of considerable size, like Lilac or other shrubs; suffruticose, when fruticose or shrubby below, and herbaceous above, as the Horseshoe Geranium; suffrutescent, when the stem has an appearance of being moderately shrubby, and is only a little woody, as the Pelargonium; arborescent, when approaching to a tree-like appearance, as the Oleander; and arboreous, when it is the trunk of a tree properly so called, as the Magnolia.

The stem is composed-beginning from the center-of the pith, the soft, spongy substance in the center of many plants, consisting of cellular tissue; the wood, or material immediately surrounding the pith; the liber, or inner bark, which is fibrous; the cortex, or outer bark, which consists of cellular tissue only; and the epidermis, or skin -a thin, membraneous covering, with pores, that envelops all the rest. The stem, longitudinally considered, comprises the nodes, or knots; and internodes, or parts between the knots.

It has been already stated that the stem is usually above ground; there are, however, several forms of underground stems, as the rhizoma, or rootstalk, a creeping stem growing wholly or partly beneath the soil; the corm, which is a very short, fleshy rhizoma; the bulb, a shorter stem, usually underground, with excessively crowded and overlapping coats; and the bulblet, which is a small excresence that grows on the older and larger bulb.

Stalks.-The stalks are the offshoots from the stem, which directly support the leaves, and are variously styled peduncles, pedicels, petioles, meaning respectively flowerstalks, footstalks and leafstalks.

Axil.-The axil is the angle formed on the upper surface, between the stem and leaf, where the buds, called on that account axillary, spring from the stem (13).


## $\mathcal{L E A V E S}$.

NDERSTOOD to be expansions or elongations from the stem, leaves consist of a network of fibers or nerves in two distinct sets, one to each surface. The purposes they serve are mainly three: to expose a broader surface to the action of the light and heat, to aid evaporation, and to facilitate the absorption of carbonic acid from the air. They discharge the function fulfilled by the lungs in the animal kingdom. They are called radical, when they spring around the root, as in the Dandelion; alternate, when only one appears on each joint of the stem, as in the Toad-flax (13); opposite, when in pairs opposite each other, as in the Mint (14); whorled, when in a circle around the stem, as in the Purple Eupatorium (15); and tufted, when they appear in bunches or tufts at the top, as in the Eryngo (16), or as in the Palm.
Leaves are further distinguished as sessile, when they sit, as it were, on the stem, without intervening stalks, as in the Eryngo (16); deciduous, if they fall annually, as in most trees and shrubs; and persistent, if they survive the season, as in the evergreens.

A leaf is simple, when composed of one piece only, as in the Round-leaved Bellflower ( I 7 ); binate, ternate, quaternate or quinate, according as it has, on a common stalk, respectively, two leaflets, as in the Listera; three, as in the Clover (18); four, as in the exceptional four-leaved Clover; or five, as in the Ampelopsis (19); pinnate, when a number of leaves are arranged feather-like along the stalk, as in the Pea (20). A simple leaf is sometimes wary along the edge, as in the China Primrose (21), or has three lobes, as in the Hypatica, five, as in the Castor-oil Plant, or seven, as in the Lady's Mantle (22).

Leaves are digitate, when they all spring, like so many fingers, from the tip of the leafstalk, as in the Virginia Creeper (23); palmate, when the leaflets leave a space at their common center, not unlike the palm of the hand, as in the Horse-chestnut (24); pedate, or foot-like, as in the Chenopodiums, or when a palmate or other leaf has an additional cleft in the edge, not as deep as the digitate, and hence called pedate, as in the Mandrake (25); peltate, or shield-like, when the stalk is attached at or near the center, as in the Nasturtium (26); perfoliate, when the stalk passes through the leaf (27), as in the Boneset; connate, when two leaves are joined at their bases, the stalk passing through at the junction, as in the Lychnis ( 28 ).

Again, by reason of peculiarities of the edges, leaves are called entire, when there is an unbroken, gradual curvature of the margin, as in the Silene (29); crenate, crenelled or scollopped, when it is notched like a scollop shell, as in the Ground Ivy (30); serrate, or

406
saw-edged, as in the Rose (31); pectinate, or comb-like, an expression sometimes used where the edges are a deeply-cut dentate; dentate, or toothed, as in the common Hoarhound ( $3^{2}$ ); inciscd, or cut, also called laciniate, when slashed or cut more irregular than in the dentate, as in the Fennel; undulate, or wavy, as in the Beech; sinuate, or sinuous, that is, of larger scope than the wary, but of the same general outline, as in the White-oak; lobed, when cut in sections, with the incisions reaching about halfway to the midrib, and these may be two-lobed, three-lobed, etc., according to their number, as already described; cleft, when cut still more deeply, half way down or more toward the midrib- the Latin equivalent fid, as a suffix, from findo, I cleave, with a qualifying prefix, is very much used in this connection, as pinnatifid, multifid, bifid, etc., denoting respectively cleft like a feather, many-cleft, two-cleft, etc. - parted, when almost reaching the midrib; and divided, or bisected, trisected, etc., when incised quite to the midrib.

In addition to the foregoing divisions, leaves are distinguished, as to form or general shape, by epithets that are sufficiently clear in themselves, or may be readily comprehended by reference to the engraving on page 328, viz.: Linear, as in grass; oblong, as in the Chickweed (33); hairlike, as in the Schizanthus (34); strap-shaped, as in the Heath (35); elliptical, as in the Rose (31); oval, or egg-shaped, as in the Apple (36); obovate, or inversely oval, as in the Juneberry (37); rounded, as in the Round-leaved Violet (38); heart-shaped, as in the Dog Violet (39); inversely heart-shaped, as in the Clover (18); kidney-shaped, as in the common Water-cress (40); arrow-shaped, as in the Sagittaria (41); angzular, as in the Hypatica (42); and sword-shaped, as in the Gladiolus (43).

Stipules are two winglike appendages that are often found at the base of the leafstalk (united with or distinct therefrom), sometimes oblong, as in the Evening Primrose, and at others arrow-shaped, as in the Rose (44).

Bracts.-These are the small leaves that are sometimes found immediately below the flower-cluster, on its stalk or peduncle, as in the Pentstemon (45, 46), generally green, but occasionally picturesquely colored, as in the Poinsettia. When they appear on the pedicel, they are called bracteoles, as in the Cardamine (47); and when these grow in a circle, or whorl, they are called an involucre, as in the Thistle (48).

Buds are the germs of the branches, as the seed is of the whole plant, and sprout from the stem as this does from the root; hence the branches might be regarded as secondary stems, or even as individual plants springing from the burls. These buds are called terminal when they appear at the end of the stem, and lateral when they appear at the sides; the most important of the lateral are the axillary already mentioned - the others being accessory or supernumerary when two or more supplement the axillary, and adventitious when they appear elsewhere than at the axils.

Estivation, or præfloration, is the arrangement of the parts of the future flower in the bud before blooming; and is called open, when the calyx and corolla are not closed over the other parts of the flower; valvate, when the several parts meet each other exactly by the edges without overlapping; induplicate, if the edges are turned in; reduplicate, if turned out; contorted, when the edges are twisted; imbricated, when they overlap; quincunxial, if two parts are inside, two outside and one intermediate; vexillary, if one petal inwraps the other parts; plicate, if the tubular corolla or calyx is folded lengthwise; and supervolute, if the folds are wrapped around each other in one direction.


## FIOWERS.

OOKING at flowers from the technical, scientific standpoint, they are the whole aggregate of the organs of reproduction; æsthetically they are the crowning glory of the plant; and familiarly, the bloom or blossom, the part for which alone most plants are cultivated. The chief parts of the flower are the Calyx, Corolla, Stamen, Pistil, Pericarp, Seed, Receptacle and Nectary.
Calyx, from the Greek through the Latin, denoting a cup, is the outer covering or leaf-like envelope of the flower, mostly green, but at times colored; it enfolds the bud before it is fully in bloom, and afterward generally surrounds the blossom loosely. Its chief use apparently is to support and protect the fine inner parts by its greater consistency; it was considered by Linnæus to be the continuation of the outer bark, performing the same service to the bud as the bark does to the stem. The calyx varies much; it is sometimes double, as in the Flax (49), and at others is a mere ring which afterward becomes the down, as in the Teasel (50).

Corolla, an abbreviated form of the Latin coronilla, a little crown, comprises the leaves of the flower proper, or blossom, within the calyx. These leaves are called petals, and are usually as many as the sepals of the calyx. When the petals are all of the same size and shape, the corolla is called regular, as in the Silene (51); and this regular corolla may be salver-shaped, as in the Lychnis (52); funnel-shaped, as in the Primrose (53); wheel-shaped, as in the Holly (54); bell-shaped, as in the Bellfower (55); trumpet-shaped, as in the Convolvulus (56). Other corollas are termed irregular, as when the petal is only one, but divided into lobes; if the lobes are open, it is called gaping, as in the Mint (57); if closed, personate or masked, as in the Snapdragon (58); when there are four petals placed crosswise, the corolla is called cruciferous, as in the Radish (59); papilionaceous, or butterfly-shaped, when therc are five rudely resembling a butterfly, as in the Pea (60).

When the calyx and corolla are not readily distinguishable, the whole corresponding part that encircles the stamens and pistils is called perianth, from two Greek words: peri, around, and anthos, a flower. Sometimes this word is used by preference, and said to be double when the calyx and corolla are both present and clearly distinguishable. Some flowers have neither calyx nor corolla, as in the Equisetum (61).

Stamen, from the Greek through the Latin, signifying the warp, and this from its standing or upright property, denotes one of the small organs, of which there are generally several, that stand around the center of the perianth, as in the Coreopsis (62), and in most flowers. They comprise the flament, or thread-like (sometimes awl-like), upright portion, and the anther, or flower proper, which is the part essential to reproduction, and contains the fine white, yellow or black dust called pollen, or fertilizing matter. The filaments are sometimes in bundles, as in the St. Johnswort (63), and at others form a hollow tube, as in the Mallows (64); the anthers are sometimes free when standing separately ( $6_{3}$ ); or united into a ring, as in the Dandelion (65).

Pistil, from the Latin denoting a pestle, is the central part and seed-bearing organ of the flower, as in the Anagallis (66); and comprises three parts: the ovary (a), the hol-

## STRUCTURE OF PLANTS.

low case or pod containing the rudimentary seeds called ovules; the style, or columń ( $b$ ), wanting in certain flowers, which bears aloft the third part, known as the stigma (c). This is the extreme viscous tip of the flower, and is exposed on all sides for the reception of the impregnating pollen from the encircling stamens. Sometimes an ovary has several styles and stigmas, when the pistil is called compound, and each part a carpel, as in the Blackberry (67). Some flowers have only stamens, while others of the same plant have only pistils as in the Cucumber (68), and as those alone that have pistils produce seed, they are called fertile, while those possessing stamens only are designated barren. Again, the pistils and stamens are sometimes to be found only in different plants of the same species, as in the Willow (69). When in different flowers of the same plant, they are called monacious, from two Greek words meaning single-housed, as in the Cucumber; when in different plants, they are termed diacious, or two-housed, as in the Willows. When the ovary is above the base of the perianth, it is termed superior, as in the Purslane (70); when below, as in the Roses, it is called inferior.

Pericarp (from the Greek peri, around, and karpos, fruit), or seed-vessel, is the case, pod or covering of the seed or seeds of a plant, the enlarged and ripened ovary, which with the enclosed seeds constitutes the fruit. It presents various forms in different plants, as the capsule in the Purslane (71), the silique in the common Mustard ( $7^{2}$ ), the silicle or capsella, a short pod ( $7^{2}$ ), in the Shepherd's Purse, the legume or long pod in the Bean (73), the berry in the Currant (74), the nut in the Hazel (75), the drupe in the Hawthorn (76), and the cone in the Pine (77). Fruits are fleshy when the seeds are encircled by a juicy, pulpy substance, as in the Apple, the Pear, the Melon and many others. Stone-fruits is the name given to those in which the pulpy matter incloses the hard, horny substance, or "stone," which covers the seed. They are called dry-fruits when the seedvessel does not become juicy or pulpy, but is a mere husk or dry covering, as in Wheat, the Five-finger, the Ground Cherry, etc.

Seed.-This is the portion destined to reproduce the plant, and is itself the result of the action between the stamens and the pistil, indicated above. The stigma receives the pollen, which is conveyed through the style to the ovary, where it comes in contact with the ovules, producing the seed that in due time arrives at the maturity necessary to reproduce the plant according to its kind. When the plumule or embryo plant is enclosed in a seed of two cotyledons, it is styled, from the Greek, dicotyledonous, that is, having two lobes, as in the Bean ( 78 ), when in one, it is monocotyledonous, as in the common Grasses or Sugar-cane; and when there is no apparent nourishing seed-lobe, it is called acotyledonous, as in the Ferns.

Receptacle is the top of the stem, or apex of the flowerstalk, from which the organs of the flower spring, and into which they may therefore be conceived as gathered or inserted, whence the name. It is conical (79), as in the Obeliscaria, chaffy (80), as in the Thistle, or bristly, as in the Cactus ( 8 r ), and is the part on which the other portions of the flower rest, as in the Scabious (82).

Nectary is a term applied to any of the organs which may happen to contain nectar, that is, the sweet secretions from the plants. The nectary of the Crown Imperial comprises a number of cells around the center of the flower, while in the Crowfoot it is a scale at the base of the petals (83).

## INFLORESCENCE.

IFFERENCES in the mode of flowering or in the general arrangement of the blossoms along the stem or branches, mark the various forms of inflorescence. When the flower that terminates the axis opens first, and the others in the order of their nearness to this one, the inflorescence is called determinate, definite, or centrifugal, as in the Hydrangea. When this order is reversed, and the first flower to bloom is the one farthest from the terminal one, this being the very last, the inflorescence is said to be indeterminate, indefinite, or centripetal, as in the Gladiolus. In a few genera the inflorescence partakes of both peculiarities, and is called mixed, as in the Teasel, and also the Liatris, familiarly designated Blazing Star. Flowers, like buds, are known as terminal when they appear at the end of the stem, as in the Parnassia (8); whorled, when grouped around the stem in a circle, as in the Mint; and axillary, when at the axils, as in the Pentstemon (45).

The flowerstalk, when common to the whole cluster, is called a peduncle, the individual stalk of each separate flower being a pedicel, as in the Cardamine (47). When the peduncle bears a single flower, the inflorescence is called simple, as in the Morning Glory (56). When the peduncle with its flower springs directly from the root of the plant, the inflorescence is called a scape, as in the English Primrose (84); and when it has several flowers placed one above another and sessile (that is, without pedicels), it is called a spike, as in the Veronica spicata (85), or spadix, which is a fleshy variety of the spike, as in the Spiranthus; raceme, where each flower of a cluster has its own pedicel arranged along a lengthened axis, as in the Canadian Milk-Vetch (86); panicle, or hranched cluster, where each pedicel (itself a branch of the peduncle) again branches, as in the Stellaria ( 87 ); corymb, where the lower flowers are on longer stalks, the intermediate on shorter, and the top ones nearly or quite sessile, as in the Mountain Ash (88); cyme, where the stalks are irregularly branched, but the flowers are nearly level at the top, as in the Dogwood (89); a fascicle is a cyme with the flowers crowded into a bundle, whence the name, as in the Sweet William; a glomerule is a dense, compact cyme resembling a head, as in the Cocklebur; umbel, where the flower-stalks spring, like so many umbrella ribs, from a common center, and rise to about the same height, each bearing its flower, as in the Milkweed (90); when, as sometimes happens, there is a smaller umbel on each pedicel, instead of a single flower, the inflorescence is called a compound umbel, as in the Carrot (91); when crowded in a dense mass and sessile, it is called a head, as in the Button-bush (92); a catkin, or ament, is a spike enclosed in a deciduous scale, as in the Hazel (93); a thyrsus is a compact panicle of pyramidal shape, as a bunch of grapes or the cluster of the Lilac.

musk in the adjective form, or musky, denotes the characteristic distinction of the Species. Hence it is not strictly correct to say that such, a name corresponds to that of an individual, as Publius Cornelius Scipio; but it would be allowable to compare it with Cornelius Scipio - Cornelius, the gens, or clan, and Scipio, the family name within the clanif, like the Romans, we lived in a state of society where these constituted a recognized division of the community. The Variety is further distinguished by one or more additional epithets, adjectives or names of persons, subjoined to the name of the Species to which it belongs, as the Fragaria Virginiana Illinoensis - the Illinois Variety of the Species of Strawberry known as the Virginian.

What these various terms imply will now be explained more in detail, taking for this purpose the foregoing divisions, as used by most modern writers on floriculture, and in an inverse order, beginning with the most restricted:

Variety.-By this term is meant such a group within the same Species as is marked in all its individuals by some striking peculiarities, and often so as to create a doubt whether it does not constitute a distinct Species.

Subspecies, or Race.-Where the marks of the Variety are regularly propagated.
Species is an aggregate of such individual plants, or varieties of plants, as agree in common attributes and characteristics, and which are designated by the same distinguishing epithet, as the Rosa moschata, ahready explained.

The Species of plants have been estimated, and probably within bounds, as high as one hundred and twenty thousand, of which nearly four thousand belong to our own country, east of the Mississippi. The more conservative estimates of earlier botanists, putting the number at about sixty thousand, will therefore have to be abandoned; the more, as new discoveries are being perpetually made.

Subgenus, or Section, is used by some botanists to denote such collections of certain Species as are more nearly allied to each other than the other plants of the same Genus.

Genus.-This embraces all the various Species that bear a strong resemblance to each other, but differ in the shape or general proportion of their parts; thus the various Species of the Roses belong to one Genus.

Tribe and Subtribe are subdivisions of the Suborder in some elaborate systems of classification.

Suborder.--For convenience of treatment, and because of important differences, an Order is often subdivided into three or four Suborders, each embracing several Genera, as, for instance, the Order Rosaceæ into the Almond or Plum, the Pear, and the Rose proper.

Order comprehends many Genera broadly resembling one another, as in having their flowers and seeds constructed on the same plan, but with very striking differences in important features. Thus the Order Rosaceæ, or Rose family, embraces not only Roses proper, but Strawberries, Blackberries, Apples, Pears, etc.

Subclass, or Alliance, is a subdivision of the Class, and embraces several Orders.
Class.-This is a still broader grouping or aggregation of plants, comprising various Orders that resemble each other in some few important features.

Series, or Subkiugdom, is the first grand division of the vegetable kingdom, and embraces all such classes as are not radically so very different as to refuse to be grouped together because of their most essential properties, such as flowering or not flowering.



## TW'ENTY-SIX ORDERS.

The foregoing twenty-four Classes were subdivided into twenty-six Orders, according to the number of pistils or distinct stigmata, as far as the twelfth order, inclusive; and above that the differences were founded on other peculiarities. It is not to be understood that each Class had twenty-six subdivisions known as Orders, but that this distribution formed a basis for thus distinguishing as many Orders as might be found by actual observation. The Class twelve or thirteen, for instance, might be comprehensive enough to give scope for the elaborate subdivision into twenty-six Orders, while most others would seldom reach beyond five, and many might have only one, two or three. The orders were as follows:

1. Monogynia, with one pistil.
2. Digynia, with two pistils.
3. Trigynia, with three pistils.
4. Tetragynia, with four pistils.
5. Pentagynia, with five pistils.
6. Hexagynia, with six pistils.
7. Heptagynia, with seven pistils.
8. Octogynia, with eight pistils.
9. Enneagynia, with nine pistils.

1o. Decagynia, with ten pistils.
ir. Dodecagynia, with twelve pistils.
12. Polygynia, with many pistils.
13. Gymnospermia, with naked seeds.
14. Angiospermia, with covered seeds.
15. Siliquosa, with seeds in siliques, or long pods.
16. Siliculosa, with seeds in silicles, or short pods.
17. Monogamia, having some florets with stamens and others with pistils.
18. Polygamia equalis, all florets having stamens and pistils.
19. Polygamia segregata, each floret having a separate calyx.
20. Monœecia, having stamens and pistils on separate flowers of the same plant.
21. Diœcia, having stamens and pistils on two plants.
22. Triœcia, having stamens and pistils on three plants.
23. Filices, Ferns.
24. Musci, Mosses.
25. Hepaticæ, Liverworts.
26. Algæ and Fungi, Seaweeds, Lichens, Funguses.

## NATURAL ORDERS O.F IINNAEUS.

No one was more sensible of the need of a natural classification of plants than the distinguished author of this artificial system, who declared that a method of classification, based on the true intrinsic differences of plants, was "the first and last desideratum in botany;" and he accordingly busied himself in arranging such a method, leaving as his contribution in that direction the following fifty-eight families:

1. Palmæ-Palms.
2. Piperitæ - Arums.
3. Calamariæ-Sedges.
4. Gramineæ - Grasses.
5. Tripetaloideæ - Rushes.
6. Ensatr - Sword-leaved, as the Iris.
7. Orchideæ - Orchids.
8. Scitamineæ - Dainty plants, as the Banana.
9. Spathaceæ - Sheathed, as the Narcissus.
10. Coronarix - Crown-bearing, as the Lily Family.

[^0]CULTIVATION AND A
18. Bicornes - Two-horned; where the pollen is
discharged by two pores or tubes, as in the
Heath and Cranberry.
19. Hesperidæ-Myrtles.
20. Rotaceæ-Wheel-form, as the Anagallis.
21. Preciæ-Primroses.
22. Caryophylleæ-Pinks.
23. Trihilatæ - Maples.
24. Corydales - Tufted, as the Fumitory.
25. Putamineæ- Pod-like-fruited, as the Caper.
26. Multisiliquæ-Many-podded, as the Hellebore.
27. Rheadeæ-Soothing, as the Poppy.
28. Luridæ-Lurid, as the Nightshade.
29. Campanaceæ-Bell-like, as the Bellflower.
30. Contortæ-Twisted back, as the Milkweed.
3I. Vepreculæ-Bushy, as the Daphne.
32. Papilionaceæ-Butterfly-shaped, as the Pea.
33. Lomentaceæ-With jointed pods, as the Cassia.
34. Cucurbitaceæ-Curved, as the Gourd.
35. Senticosæ-Thorny, as the Rose.
36. Pomaceæ-Apple.
37. Columniferæ-Column-like, as the Mallow.
38. Tricocceæ - Three-kerneled, as the Spurge.
39. Siliquosæ- With long pods, as the Mustard;
same as Cruciferæ, or Tetradynamia.
40. Personatx-Masked, as the Snapdragon; nearly same as Didynamia Angiospermia.
41. Asperifoliæ - Rough-leaved, as the Borage.
42. Verticillatæ - Whorled, as the Holly; nearly equivalent to Didynamia Gymnospermia.
43. Dumosæ - Swelling, as the Viburnum.
44. Sepiariæ - With seeds hedged in, as the Jasmine.
45. Umbellatæ - Umbrella-like, as the Parsley.
46. Hederaceæ-Ivy.
47. Stellatæ - Star-like, as the Madder.
48. Aggregatæ - Scale-like, as the Scabious.
49. Compositæ - With massed flowers, as the Sunflower.
50. Amentaceæ - With catkins, as the Willow.
51. Coniferæ - Cone-bearing, as the Fir.
52. Coadunatæ - United at the base, as the Magnolia.
53. Scabridæ - Rough, as the Nettle.
54. Miscellanex - Miscellaneous flowering plants not embraced in the foregoing.
55. Filices - Ferns.
56. Musci - Mosses.
57. Algæ - Seaweeds.
58. Fungi - Funguses.


## $\mathcal{N A} T U R A L S Y S T E M S$.

7 HE more recent botanists have developed various natural systems of classification, based on the internal affinities and essential properties of plants. One of the great advantages derivable from such methods is the bringing together into the same groups the plants that approach nearest to each other in structural characteristics. They are of course more philosophical than the artificial methods, which depended mainly on outward similarities; but the final determination of the numerous divisions and subdivisions of the vegetable kingdom, and the most appropriate nomenclature, has not yet been reached. The investigations of specialists are continually bringing to light new peculiarities, or differences that had escaped the notice of earlier observers. And hence every new writer on botany devises a method which is assumed to be an improvement on what preceded him.
Our distinguished native botanist, Dr. Asa Gray, of Harvard University, whose elementary works on botany have been declared by competent criticism to be "unsurpassed in the language for precision, simplicity, perspicuity and comprehensiveness," has formed a very elaborate system, mainly natural, but with a slight admixture of the artificial method.

The following table, showing a natural system, has been constructed, mainly from the "Genera Plantarum " of the late Austro-Hungarian botanist, Stephen Ladislaus Endlicher:





UCH literary leave－takings as epilogues and l＇envoys have grown into perhaps deserved disuse：for，as Shakespeare says，＂A good play needs no epilogue；＂yet，before taking final leave of a work that has constituted the delightful labor of many years，and bidding good－bye， as it were，to the thousands of human beings to whom the book will afford an introduction，the author would fain add a parting word to enforce the incalculable moral，intellectual and æsthetic value of flori－ culture．Science，in any department of knowledge，is of intrinsic worth to the human mind，but floriculture is eminently instructive，useful and agree－ able．If all the plants of the world were of one shape，size and color，there would result a monotonous uniformity so burdensome to our imagination as can scarcely be conceived in the presence of the almost infinite variety we now enjoy．Nature，as if enticing us to search for her hidden treasures，has ．produced many wonderful forms so different from each other that our curi－ osity is awakened when we first observe some unusual product of her handiwork； and，thus stimulated，we are led to look for fresh peculiarities，and to push our investigations into the innumerable recesses of the vegetable kingdom．
The researches of the botanists have added largely to our list of food－plants，and have given us a sure guide as to which，among the many varieties of edible plants，are hest adapted to supply our wants．Indeed，primitive man must have been a botanist in a small way when he first discovered that plants afforded food fit for his use；so that a rude botany must have been the first science cultivated among men．The first step toward civilization was therefore made by each wild tribe when，with some uncouth dibble，or pointed stick，they planted the first seed in the fruitful earth；and the cultivation of plants， though doubtless long confined to the food－plants only，constituted an important factor in the career of humanity as it progressed to refinement．Even now，when man has reached the greatest height yet attained，there is no better test of the civilization of the individual or the nation than the degree in which floriculture has become a fine art．So the ama－ teur culturist may gather confidence from the thought that his favorite pursuit is the first and the last step in the progress of civilization．A knowledge of the healing proper－ ties of plants has been found no less useful by physicians．Indeed，for long ages the healing art was entirely confined to their use；and Liebig has said that all ordinary dis－ eases may be cured or averted by a judicious change of the constituents of our plant－food．

An outline study of botany, or (what is sometimes substituted for this) a close observation of nature, is necessary in most of the arts and sciences. The graceful, wavy, curved lines of flowers, leaves and fruits form an important feature in arehitectural ornamentation, as well as in the minor arts of cabinet-making, engraving, molding and the like. The exquisite blending of colors in the flowers and foliage of plants furnishes the painter with studies which he mily imitate but cannot surpass. And the poets have ever been indebted to the regetable kingdom for some of their happiest flights of brilliant fancy.

A love of flowers will supply a praiseworthy incentive to the merchant, clerk, artisan or laborer to leave behind him the smoke, dust and disconfort of the crowded city, and bask during an hour's or a day's leisure in the invigorating country air, while he enlarges his stock of knowledge by investigations that gently interest but clo not overtax his intellectual power:. The moralist will find in the love of plants and flowers a helpful handmaiden to religion and virtue; even the mechanical pursuit of the mere trade of gardener has been conducive to a relatively superior morality, and freedom from crime. Horace Mann found that there were fewer gardeners, in proportion to their numbers, than of any other trade or calling in the poorhouses and prisons of Great Britain. Floriculture has also an advantage over many amateur pursuits in the cheapness and facility with which it can be followed, as every plant may be regarded as an unfolded book, and every flower an attractive object-lesson, while, unlike mechanics, astronomy or chemistry, it needs no expensive working apparatus. Flowers are the most delightful of all teachers.

THE LVE OF FLOUERS.
God might have bade the earth bring forth Enough for great and small, The oak-tree and the cedar-tree, Without a flower at all.
We might have had enough, enough For every want of ours,
For luxury, medicine and toil, And yet have had no flowers.
Then wherefore, wherefore were they made, All dyed with rainbow light,
All fashioned with supremest grace Upspringing day and night:-
Springing in valleys green and low, And on the mountains high,
And in the silent wilderness Where no man passes by?
Our outward life requires them not; Then wherefore had they birth?
To minister delight to man, To beautify the earth;
To comfort man-to whisper life, Whene'er his faith is dim.
For who so careth for the flowers Will care much more for him! -. Ifary Hozuitt.



## Tride of Sentiment.

A belle-Orchis, 227 .
AbruptNess - Borage, 52.
Absence-Wormwood, 322 .
A constavt heart - Bellflower, 47
Adulation - Cacalia, 63 .

- gift - Eutoca, 130.

Agricletcre - Medick, 205.
Alaleremest - Quince, 255.
Alwiys delightfel - Cineraria, Sos.
Ambition-Hollyhock, 158.
A meeting- Musk Plant, 215.
A messenger - Yris, 1 万3.
Ammbility - White Jasmine, 175.
Amin nature's beauties - Persimmon, 238 .

- Avticipition - Anemone, i8.

Architecture - Candytuft, 7 i.
Artifice-Fennel Flower, 133.
A sour disposition - Berberry, $\boldsymbol{f}^{8}$.
Asylum-Juniper, 176.
A trifling character - Bladdernut, 51 .
Attichmext - Ipomoea, ifl.
Austerity - Thistle, 299.
Authority - Yucca, 325 .
Awhkewisg hove-Lilac, 188.
Baseness-Dodder, 115.
Bashflel modesty - Sensitive Plant, 27.).
Beauty in retiremext - Rhodora, 258 .
Beloved daughter - Potentilla, 250.
Benevolence - Calycanthus, 68.
Benefits-Spikenard, 282.
Beneficexce - Feverfew, I 35 .
Beware-Oleander, 223
Biceshes - Sweet Marjoram, 201.
Blushing beatty - Damask Rose, 262.
Boasting - Hydrangea, 167.
Bonds of love- Honeysuckle, 161.
Bounid by fate - Marsh Andromeda, 17 .
Boonry - Double China Aster, 83.
Bravery - Lion's Heart, 191.

BrillifNey - Poinsettia, 246.
C.alimisy - Hellebore, I 56.

Cin you bear poverty - Browallia, 57.
Charms-Sweet Balm, 38 .
Charms-Musk Rose, 265.
Chastity - Orange, 226.
Cheerfulaess-Spring Crocus, 10 .
Cheerfulness in old age - Aster, 32.
Chivalry - Daffodil, 107.
Cold-hearted - Lettuce, 187.
Complaint - Ground Pine, 150.
Confession - Lavender, 185 ,
Confidence-Geranium, 144 .
Consolation - Snowdrop, 277 .
Conquer your love - Asclepias, 27.
Contempt - Carnation, 75.
Coquetry - Day Lily, if.3.
Country life - Oats, 222.
Courtesy - Maurandia, 203.
Cruelty - Marigold, 200.
Ceriosity - Walking Fern, 134 .
Danger- Dragon's Claw, ${ }_{1 i} 7$.
De.tth - Deadly Nightshade, ilf.
Deceit - Adder's Tongue, 2.
Deceit -Venus's Fly-trap, 309.
Deceitfll Charms - Thorn Apple, 30 .
Deception - Winter Cherry, 320 .
Deceptive appearances - Chentmut, So.
Declaration of love - Tulip, 3 ob.
Defense-Privet, 25?.
Deformity - Begonia, $4^{6}$.
Delay-Eupatorium, iz8.
Delirium-Foxglove, 140.
Departure-Sweet Pea, 234.
Design - Dyer's Weed, ifg.
Despatr - Almond. 7.
Detraction - Clothur, 89 .
Devotion-Heliotrope, 155.

Difficulty - Thorn, 300
Diffidence-Cyclamen, 105.
Dignity - Dahlia, 108.
Discretion - Lemon Blossom, i86.
Distrust - Buttercup, 6i.
Does he possess riches - Golden Bartonia, 42.
Domestic industry -Flax, 137 .
Domestic virtue - Sage, 269.
Dreams-Osmunda, 229 .
Early friendship - Periwinkle, 237.
Ecstasy - Lophospermum, 19.5.
Elegance - Birch, 49.
Eeoquence - Crape Myrtle, ioo.
Eloquence - Water Lily, 316.
Emulation - Asparagus, 29.
Energy - Salvia, 270.
Enjoyment - Ground Ivy, 149 .
Enthusinsm-Gum Tree, 15 .
Estimation-Indian Mallow, ifo.
Eternity - Eternal Flower, 127.
Excessive sexsibility - Aspen, 30.
Exhilaration - Snowdrop Tree, 278 .
Experience - Sarsaparilla, 27 I .
Extent - Gourd, 147.
Falsehood-Apocynum, 20.
Fame - Trumpet Flower, 304.
Fancy - Globe Flower, 146.
Farewell-Spruce, 283.
Fate-Hemp, 157.
Favor - Sassafras, 272.
Fear - Arethusa, 24.
Felicity - Sweet Sultan, 293.
Female fidelity - Speedwell, 280.
Female lovelfiness - Justicia, 177.
Feminine beauty - Calla Lily, 67.
Festivity - Parsley, 232.
Fickleness-Lady's Slipper, i 79.
Fidelity in misfortune - Wallfower, 314.
Filial affection - Virgin's Bower, 急,
Fitness - Sweet Flag. 291.
Flattery - Venus's Looking.glass, 310.
Folly - Columbine, 93.
Forpery - Cock scomb; 92.
Foresight - Holly, 159.
Forgiveness - Aloysia, 9.
Formality - Ice Plant, 169.
Fortitude - English Moss, 125.
Frankness - Basket Osier, 228.
Friendship - Rose Acacia, 1.
Future happiness - Celandine, 78 .
Gaiety - Butter Hy Orchis, 6?.

Good nature - Mullein, 214 .
Goodness-Mallow, 198.
Good wishes - Sweet Basil, 43 .
Gossip - Cobæa, 9I.
Glorious beavty - Clianthus, 88.
Glory - Laurel, i83.
Grace-Fuchsia, 142 .
Grandevi - Ash, 28.
Gratitude - Canterbury Bells, 72
Greatness - Cotton Plant, 98.
Grief-Aloe, 8.
Happy at all times - Coreopsis, 94.
Hardihoon-Cranberry, 99.
Health - Fir Balsam, 136.
Heroism - Nasturtium, 218.
Hidden qualities - Sweet Potato, 292.
High-bred - Pentstemon, 236.
Holy love - Passion Flower, 233.
Номе- Eglantine, 121.
Honesty - Honesty, 160 .
Honesty true nobility - Dogwood, 116.
Honor - Oak, 221.
Humility - Broom, 5.5.
Hypocrisy - Bugloss, 58.
I Am thy prisoner - Catchfly, 76 .
I am your captive - Peach Blossom, 235 .
I die if neglected - Laurestine, i 8 _.
I change not - Globe Amaranth, in.
I live for thee - Red Cedar, 77.
Immortality - Amaranth, if.
Impatience-Balsamine, 4 I.
Impatience - Cuphea, ioz.
Imperial power - Crown Imperial, 102.
Indecision - Bulrush, 59.
Indifference-Mustard, 216.
Industry - Clover, go.
Infatuation-Cardamine, 73.
Ingratitude- Ranunculus, 257.
Injustice- Hop, 162.
Innocence-Dwarf Pink, il 8 .
Innocence and beauty - Daisy, iog.
Inspiration - Angelica, 19.
Instinct - Pitcher Plant, 244.
Intellect - Walnut, 3 15.
Intoxication-Baccharis, 35.
Intrinsic worth-Gentian, i43.
Intrusion - Bouncing Bess, 53 .
I reject you - Black Hoarhound, 50 .
I respect thy tears - Bayberry, 44 .
I will think of it - Single China Aster, 84 .

I value your sympathy - Wild Balm, 39.
Jealousy - Hyacinth, 166.
Jesting - Southernwood, 279.
Justice-Rudbeckia, 267.
Justice to you - Tussilago, 307 .
Keep your promises - Petunia, 239.
Knight-errantry - Monkshood, 21 .
Libor-Broom Corn, 56.
Lasting friendship - Ivy, if+.
Let me heil thy grief - Arnica, 26.
Levity - Larkspur, i82.
Lightning - Pomegranate, 247 .
Ligitt-heartedness - Shamrock, 274 .
Lofty thoughts - Sunflower, 290.
Love-Myrtle, 217.
Loveliness - Austrian Rose, 260.
Love of nature - Magnolia, 197.
Lovers' tryst - Beech, 45 .
Luxury - Horse Chestnut, 163.
Malevolence - Lobelia, 193.
Marriage - Citron, $8_{7}$.
Matrimony - American Linden, 16.
Medicine-Endive, 124.
Meekness with dignity - Plumbago, 245 .
Melancholy - Weeping Willow, $3^{17}$.
Memory - Syringa, 296.
Mental beauty - Kennedya, 178 .
Mercy-Chamomile, 79.
Merit - Coriander, 95.
Merit before beauty - Alyssum, io.
Mirth-Pimpernel, 2 ² $^{2}$.
Misantfropy - Teasel, 298.
Modesty - Violet, 312.
Necessity - Mermaid Weed, 207.
Night - Ebenaster, izo.
Nobility - Queen of the prairie, 2.54 .
Novelty - Calceolaria, 66.
Obstacles to be overcome - Mistletoe, 210.
Offense-Stapelia, 284 .
Opinion-Escallonia, i26.
Opportunity - Phaseolus, zqo.
Obliging disposition - Valerian, 308.
Painting - Auricula, 33.
Parental affection - Oxalis, 230 .
Patriotism - American Elm, 55.
Peace-Olive, 225.
Perfect goodness - Strawberry, 287.
Perfect loveliness - Camellia, 69.

Persecution - Fritillaria, iqi.
Perseverance - Canary Grass, 70.
Philanthropy - Melilot, 206.
Philosophy - Pine, 243.
Pleasure-Loasa, 192.
Politeness - Ageratum, 4 .
Praise-Queen of the Meadow, 253.
Preference-Apple Blossoin, 2 I.
Preferment-Cardinal Flower, 74
Presumption - Snapdragon, 275 .
Pride - Amaryllis, 13.
Pride befriend me - Tiger Flower, 303.
Promptitude-Matthiola, 202.
Prodigality-Aristolochia, 25.
Prosperity - Nemophila, 219.
Providence-Oleaster, 224.
Proximity undesirable-Burdock, 60.
Prudent economy - Chicory, 82.
Purification-Hyssop, 68.
Purity - Lily, 189.
Quick-sightedness - Hawkweed, 152.
Ready armed - Gladiolus, 145 .
Reciprocity - Star Flower, 285.
Reconciliation - Star of Bethlehem, 286.
Remembered beyond the tomb - Asphodel, 3 I.
Remembrance - Rosemary, 264.
Repentance-Rue, 268.
Repose- Morning Glory, 212.
Reproof-Euphorbia, 129.
Reserve-Rock Maple, 199.
Resistance - Tansy, 297.
Retirement - Lake-flower, i8o.
Return of happiness-Lily of the Valley, 190.
Riches - Wheat, 3 I8.
Rigor-Lantana, i8i.
Rivalry - Rocket, 259.
Rumor - Mayweed, 204.
Secrecy - White Rose, 266.
Sensibility - Verbena, 31 I.
Sculpture - Hoya, 165.
Shame-Pæony, 23 I.
Single blessedness - Bachelor's Button, 36 .
Simplictry - Arbutus, 23.
Slander - Nettle, 220.
Sleef - Opium Poppy, 248.
Slighted affections - Chrysanthemum, 8.5
Solitude - Heath, 53.
Sorcery - Enchanter's Nightshade, 123.
Sorrow - Cypress, 106.
Sorrow - Yew, 324.

Sorrowful remembrances-Adonis, 3 .
Splendor-Sumach, 288.
Star of my existence - Chickweed, Si.
Stotcism - Box, 54 .
Stratagem - Sweet William, 29t.
Success - Summer Savory, 289.
Success crown your wishes - Coronilla, 97.
Suspense - Ipomopsis, 172.
Sweets to the sweet - Daphne, ili.
Sympathy - Thrift, 302.
Sympathetic feeling - Balm of Gilead, to.
Talking - Rosebay, 26 .
Tears-Helenium, 154.
Temperance - Azalea, 34 .
Temptation-Apricot, 22.
Time-Four-o-clock, 139.
Thankfulness - Agrimony, 5.
Thine till death - American Arbor Vitæ, 14.
Thoughts in absence - Zinnia, 326.
Thoughts of heaven - Snowball, 276.
Threats - Rose-leaved Rubus, 263.
Transient happiness - Spiderwort, 2 Si.
Transient beauty - Night-blooming Cactus, 64 . 'Trifling beauty - Flower-of-an-Hour, i38.
Unanimity - Phlox, $2 \not+1$. Understanding - White Walnut, 319.

Unforfusite attachments - Mourning Bride, 213.

Utility - Grass, 148.
Variety - Portulaca, $2 \not f y$.
Vice-Darnel, ir2.
Vicrssitude-Locust, 194.
Virtue-Mint, 209.
Vivacity - Houseleek, 164 .
Voluptuousness - Tuberose, 305.
Voraciousness - Lupine, 196.
WAR - Yarrow, 323.
$W_{\text {IT }}$ - Ragged Robin, 256.
Witchery - Witch Hazel, 32i.
Woodland beauty - Sycamore, 295.
Worth above beauty - Corn Cockle, 96.
Worthy all praise-Fennel, 132.
You excite my curiosity - Molucca Balm, 37 .
You please all-Currant, io4.
Your eyes are bewitching - Eyebright, 131
Your qualities surpass your charms - Mig. nonette, 208.
You terrify me - Snake Cactus, 65 .
Youth - Primrose, 251 .
Youthful recollections - Dandelion, yio.
Zeal-Elder, 122.



[^0]:    11. Sarmentaceæ-Runner-bearing, as the Strawberry.
    12. Holoraceæ - Whole-rooted, as the Goosefoot.
    13. Succulentæ - Succulent, as the Purslane.
    14. Gruinales - Crane-bill, as the Geranium.
    15. Inundatæ - Pond-weeds, as the Potomageton.
    16. Calycifloræ- Where the calyx-tube encloses the ovary, as the Oleaster.
    17. Calycanthemæ - With the stamens inserted in the throat of the calyx, as the Melastomas.
